





# TWO LECTURES

ON THE

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## CONDITIONS OF HEALTH AND WEALTH EDUCATIONALLY CONSIDERED.

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“Non famæ, nee opinioni, sed veritati soli litandum censeo.”

JOANNES LOCKE, *Epist. ad Philip. a Limborch*, 22 Feb. 1701.



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"That the age writes so much on education shows at once its absence and the feeling of its importance. Only lost things are cried about the streets."—*Lerana*. Translated from the German of J. P. FR. RICHTER, 1848, p. 26.

"Those who, in their own minds, their health, or their fortunes, feel the cursed effects of a wrong education, would do well to consider they cannot better make amends for what was amiss in themselves than by preventing the same in their posterity."—BISHOP BERKELEY, *The Minute Philosopher*, Dial. vii. s. 34.

"In children a new humanity holds out its hand. We take one race, and score them all over with errors; then God seems in His kindness to say, 'Here is a new race—begin once more.' Oh, when shall we begin wisely?"—R. C. WATERSTON, *Thoughts on Moral and Spiritual Culture*, 1843, p. 18.

"Il n'y a qu'une science à enseigner aux enfants, c'est celle des devoirs de l'homme."—ROUSSEAU, *Emile*, liv. i.

"It is a most important truth, and one which requires at this day to be most earnestly enforced, that it is by the study of facts, whether relating to nature or to man, and not by any pretended cultivation of the mind by poetry, oratory, and moral or critical dissertations, that the understandings of mankind in general will be most improved, and their views of things rendered most accurate."—DR. ARNOLD, in *Thompson's History of Roman Literature*, 1852, p. 379 (from *Encycl. Metropol.*)

"Without habits of industry, without the means of obtaining a livelihood, without cleanliness, without a comfortable home, no religious instruction will insure a future harvest; it will be either seed thrown upon the rocks, or seed thrown away among thorns, to be choked by the cares and temptations of the world."—LORD JOHN RUSSELL, at Inauguration of Manchester Ragged and Industrial Schools, 22d October 1858.

"The malady is inward and fundamental: it rises not from the *position* in which men are, but from the *men* themselves. It is with the men we should begin, and they will remodel their position. We must go to the elements and re-order them; they will not be different when put together from what they were when alone. If education reforms the individual, society—the aggregate of individuals—can alone be reformed by education."—THOMAS WYSE, *Education Reform*, 1836, p. 223.

## LECTURE I.

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# ON THE CONDITIONS OF HEALTH EDUCATIONALLY CONSIDERED.

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“ Christian religion, carrying us to heaven, does it by the way of a man; and by the body it serves the soul, as by the soul it serves God; therefore it endeavours to secure the body and its interest, that it may continue the opportunities of a crown, and prolong the stage in which we are to run for the mighty prize of our salvation.”

JEREMY TAYLOR, *Sermon on “ Christian Prudence,”* Ser xx., p. 1. s. 3.

"A healthy nature may, or may not, be great; but there is no great nature that is not healthy."—T. CARLYLE, *Miscell.*, vol. v. p. 251. Sir Walter Scott.

"Training the body to keep it well is a better thing than physicking it when it is ill."—PLATO. *Whewell's Platonic Dialogues for English Readers*, 1860, vol. ii. p. 241. GORGIAS.

"The supreme worth of true and universal temperance, or the spirit of obedience to all the laws of man's manifold and miraculous nature,—the physical, the vegetative, the animal, the intellectual, the moral, the spiritual, and the amazing union of all these categories in one harmonious code. Temperance is the very angel of health; and health is literally nothing but another name for the wholeness of the stuff and manner of our existence."—DR. SAMUEL BROWN, *Lectures, Essays, &c.*, 1858. Vol. ii. p. 250. *Physical Puritanism*.


"Il faut que le corps ait de la vigueur pour obéir à l'âme; un bon serviteur doit être robuste. . . . Plus le corps est faible, plus il commande; plus il est fort, plus il obéit."—ROUSSEAU, *Emile*, Liv. I.

"The cause of morality,—of everything that is connected with the onward movement of the race,—is more dependent upon the bodily health, upon the organic soundness of the human constitution, than many politicians, moralists, and divines, seem ready to believe."—DR. JOHN BROWN, *Horæ Subsecivæ*, 1858, p. 132. Dr. A. Combe.

"Vice is rather the effect than the cause of physical misery, and the surest mode of attacking it is to improve the physical condition of the lower classes; to abolish foul air, fouled water, foul lodging, and overcrowded dwellings, in which morality is difficult, and common decency impossible."—REV. C. KINGSLEY, *Miscellanies*, 1859. Vol. i. p. 131. *A Mad World My Masters*.

"Health underlies all there is of a man. I think a man ill-bodied cannot think healthily. It would surprise people to see how many things which have shaken the world with controversy, and burdened it with error, had their origin in indigestion. It is humbling, but it is true, that the action of the mind depends upon the state of the sinews and the blood. To be sure, there have been cases in which, from a diseased body, the mind has shone out strong and good, triumphant over fleshly ill; but these are not the rule. No man would think of going into battle with a handful of unarmed men, because such have won victories; or of going to sea in an unrigged ship; because dismantled and dismantled vessels have come safely into port. *Health is a duty*. If a man would carry his mind aright, and have it work with power, let him seek to be healthy."—HENRY WARD BEECHER, *Life Thoughts*, 1859, second series, p. 95.





# ON THE CONDITIONS OF HEALTH EDUCATIONALLY CONSIDERED.

IN Education, as in all other things, we are chiefly guided by habit and by example : by habit, which, working from within, outwards upon others, forms example ; by example, which, working from without, inwards upon us, confirms, if it does not form, habit. We send our children to school because we ourselves went to school, and because others send their children also to school. Our children go to school because they are sent, and because other children do likewise ; and, when there, they learn what other children learn, that is, in the main, what their parents learned in their young days, with such additions and changes as the fashion of the time may have introduced. But the majority of parents do not, perhaps, more than the majority of children, seriously consider what is the purpose of learning—what it is that recommends the several subjects of instruction included in preference to those excluded, and whether the inclusion and the exclusion are justified by reason and the nature of things, or merely defensible on the ground of custom and of long prescription. That present systems of education are, in their chief features, our inheritance from times long past, is surely a reason rather why we should examine, than why we should blindly accept, their claims to our respect. We shall do well, I think, to regard these systems, from time to time, in the light, not of custom, but of reason ; to shake off, as far as possible, the bondage of habit and example, and to try them as if they were now for the first time proposed to be established.—What are their deficiencies, their redundancies, their errors ? How far have they kept pace with the altered conditions and advancing necessities of our time ? What additions, what corrections need to be made ? Can it be justly maintained that our educational progress has been equal to our social progress in other ways ; or that, in respect

either of its diffusion or of its quality, education is what it ought to be? It is of its quality only that I would now speak, and with special reference to the two subjects which I have undertaken to treat, both of which, I contend, ought to hold a prominent place in every educational system for the young, of both sexes and of every rank; while, with rare exceptions, neither subject is yet admitted to even the most subordinate position. I do not think these subjects important because I am interested in them; I am interested in them because I believe them to be most important.

If we ask ourselves for what reason or purpose any subject is, or ought to be, taught in any school, I think we shall find that the justification consists in one or other (or both) of two things: either in its direct tendency to qualify for the discharge of professional, or social, or other duty in after life; or in its tendency to enlarge the capacity and improve the nature of the individual regarded as an end in himself,—to train his judgment, to develop his understanding, to purify his heart, to elevate his tastes, to form his character for good, to guide his conduct; in short, to make him a wiser, better, and nobler being than without it he would be. The former of these ends is sometimes called the *utilitarian* or *practical*, sometimes the *objective* or *external*, while the latter is called the *subjective* or the *internal*. None of these names, however, comes up to what is wanted in the way of distinctive designation. Bearing in mind the distinction between the two educational systems of the great Pestalozzi, and of his disciple Fellenberg, one of which sought, it has been said, to *develop*, the other to *fit*, I venture to call the one tendency the *expansive*, the other the *adaptive*; the former aiming, with Pestalozzi, to *develop*—the latter, with Fellenberg, to *fit* or *qualify*.

As examples of these two tendencies, let us take two marked cases. In so far as book-keeping by single or double entry is a desirable subject of instruction in a school (and I think its importance is rather underrated than overrated), it will not be alleged that it is so because it tends generally to expand the faculties, but mainly because it tends to fit for mercantile pursuits, whereby an honest livelihood may be earned. The use of astronomy, however, waiving its appli-



cability to navigation, which is of avail to comparatively few, consists in its power to enlarge the mental vision, to give wider and grander and juster conceptions of the vastness of the universe, of man's place therein, and of Him who made alike the sun and its planets, and the stars, and man himself, who, in his brief span of life, can yet measure their majestic revolutions. Be it observed, that neither of these tendencies is necessarily exclusive of the other; that, on the contrary, they often work together most harmoniously, though different subjects manifest the two tendencies in very different degrees. Nay, the same subject may manifest them in different proportions to different persons. Thus the study of chemistry or of geology is not the same thing to the future lawyer as to the future farmer. Both derive from it what expansive and elevating power it affords; but only the latter derives from it the advantage it gives in its application to scientific agriculture. It *develops* both, but it *fits* or *qualifies* only the latter. So the study of the law is one thing to the embryo farmer, and another thing, in fact, two things, to the embryo lawyer. The former derives only one of the two advantages, the latter derives both.

Now, if I proposed to assert a place for the study of the Conditions of Health and Wealth on either of these grounds exclusive of the other, an important question might here arise, Which of these two grounds is the more important? But, as I take my stand on both grounds, that question, however interesting or profitable its discussion might be found, may be dismissed at once.\*

In my next lecture I shall consider *wealth*, but to-night it is of *health* that I would speak.

First, then,—though it is not possible wholly to separate the two grounds,—as to the ground of adaptation or *utility*, as the word is vulgarly employed. It is surely evident, that while health has no direct tendency to make a man a better lawyer any more than a better tailor, it has a most powerful, if in-

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\* "A good education should *develop*, like Pestalozzi's, and *fit* like De Fellenberg's. Their union is essential. We cannot fulfil the will of God without fulfilling our duties in society, nor our duties in society without first developing the moral and intellectual qualities by means of which such duties are to be fulfilled."—*Education Reform*. By THOS. WYSE, Esq., M.P., 1836, pt. i. c. i. p 73, *note*.

direct, tendency to make him better, not only in either of those vocations, but in every other. What duty, what service, what occupation, what trade or profession or calling, is there in the world that is not dependent upon health? Which of them all can be discharged or fulfilled without it? Is there one of them that, other conditions being equal, is not the better discharged just in the measure of the possession of health? On this it were, indeed, superfluous to insist, or, at least, to enlarge. But upon health happiness, as well as usefulness, greatly depends. Length of life is mainly, and even benevolence and morality are, in no small degree, dependent upon health.

"Happiness," says Sidney Smith, whose wit must not blind us to his wisdom, "is not impossible without health, but it is of very difficult attainment. I do not mean by health merely an absence of dangerous complaints, but that the body should be in perfect tune—full of vigour and alacrity. The longer I live the more I am convinced that the apothecary is of more importance than Seneca, and that half the unhappiness in the world proceeds from little stoppages, from a duct choked up, from food pressing in the wrong place, from a vexed duodenum, or an agitated pylorus. The deception, as practised upon human creatures, is curious and entertaining. My friend sups late; he eats some strong soup, then a lobster, then some tart, and he dilutes these excellent varieties with wine. The next day I call upon him. He is going to sell his house in London, and to retire into the country. He is alarmed for his eldest daughter's health. His expenses are hourly increasing, and nothing but a timely retreat can save him from ruin. All this is the lobster; and when over-excited nature has had time to manage this testaceous enmeshment, the daughter recovers, the finances are in good order, and every rural idea is excluded from the mind. In the same manner, old friendships are destroyed by toasted cheese, and hard salted meat has led to suicide. Unpleasant feelings of the body produce corresponding sensations in the mind, and a great scene of wretchedness is sketched out by a morsel of indigestible and misguided food. Of such infinite consequence to happiness is it to study the body."

Again he says: "I have nothing new to say upon the management which the body requires. The common rules are the best,—exercise without fatigue, generous living without excess, early rising, and moderation in sleeping. These are the apophthegms of old women; but if they are not attended to, happiness becomes so extremely difficult that very few persons can attain to it. *In this point of view the care of the body becomes a subject of elevation and importance.* A walk in the fields, an hour's less sleep, may remove all those bodily vexations and disquietudes which are such formidable enemies to virtue; and may enable the mind to pursue its own resolves without that constant train of temptations to resist, and

obstacles to overcome, which it always experiences from the bad organization of its companion. Johnson says, 'Every man is a rascal when he is sick,'—meaning, I suppose, that he has no benevolent dispositions at that period towards his fellow-creatures, but that his notions assume a character of greater affinity to his bodily feelings, and that, feeling pain, he becomes malevolent; and if this be true of great diseases, it is true in a less degree of the smaller ailments of the body."\*

On longevity, Dr. Southwood Smith thus writes:—

"Were the physical condition always perfect, and the mental state always that of enjoyment, the duration of life would always be extended to the utmost limit compatible with that of the organization of the body. But, as this fortunate occurrence seldom or never happens, human life seldom or never numbers the full measure of its days. Uniform experience shows, however, that, provided no accident occurs to interrupt the usual course, in proportion as body and mind approximate to this state, life is long; and as they recede from it, it is short. Improvement of the physical condition affords a foundation for the improvement of the mental state; improvement of the mental state improves, up to a certain point, the physical condition; and in the ratio in which this twofold improvement is effected the duration of life increases. Longevity then, is a good, in the first place, because it is a sign and a consequence of the possession of a certain amount of enjoyment; and, in the second place, because, this being the case, of course in proportion as the term of life is extended the sum of enjoyment must be augmented. And this view of longevity assigns the cause and shows the reasonableness of that desire for long life which is so universal and constant as to be commonly considered instinctive. Longevity and happiness, if not invariably, are generally coincident. If there may be happiness without longevity, the converse is not possible; there cannot be longevity without happiness. Unless the state of the body be that of tolerable health, and the state of the mind that of tolerable enjoyment, long life is unattainable; these physical and mental conditions no longer existing, nor capable of existing, the desire of life and the pleasure of retaining it cease together."†

But to a sane, much more to an intelligent audience, it is superfluous to expatiate on the importance of health for the attainment of any of the ends, whether the lowest or the highest, for which we believe that life was given.

Can it, then, be said that health is abundantly possessed by this or by any other people, and that its indispensable conditions are everywhere, or even anywhere, sufficiently fulfilled? It is not easy even to enumerate the daily and hourly violations of those conditions, and the lamentable results of those violations. In truth, when we look around us, we may well

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\* *Memoir, &c.*, vol. i. p. 125. 1855. † *Philosophy of Health*, c. iv. p. 110.

be amazed at the elasticity and conservative forces of nature which allow life itself to be at all sustained in spite of so extensive an infringement of its primary conditions. Let us cast a hurried glance at a few of the various forms of that infringement.

To drunkenness it is not necessary here to do more than allude, though it is still the dominant vice of this our country,—a vice hideous in itself, and the fruitful parent of other vices. The very fact that the much wider term—intemperance—has come, in popular speech, to mean drunkenness, alone strikingly attests the prevalence of this evil. We are all agreed as to its destructiveness to bodily and mental health, and deplore it as heartily from the sanitary as from the moral or religious point of view. But it is worthy of, at least, a passing remark, that drunkenness itself, in a great number of cases, is but the result of other violations of health-conditions. Nervous exhaustion, whether by muscular or by mental labour; deficient, excessive, or improper food; exposure to noxious vapours or impure air; neglect of cleanliness;—each and all do much to produce that craving for stimulant which intoxicating liquors for the time assuage, while the indulgence in them aggravates the mischief, and breeds the necessity for their more and more frequent and copious use. Drunkenness is thus an effect as well as a cause of evil. It is too often, perhaps, regarded solely as a cause.

Neither is it needful here to say much of intemperance in eating,\* or in other indulgences which injure thousands, and, in the long run, even slay many more than either pestilence or famine.

There are other and subtler forms of intemperance. There is intemperance in thinking as well as in drinking or in eating,—an intemperance which civilisation tends, in some respects, to increase, and which assumes not unfrequently the aspect of a virtue rather than of a vice. It is not the sensual and the grovelling, it is rather the spiritual and the aspiring,

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\* "All people above the condition of labourers are ruined by excess of stimulus and nourishment, clergy included. I never yet saw any gentleman who ate and drank as little as was reasonable."—Rev. SIDNEY SMITH, *Memoir*, vol. ii. p. 120. 1855.



that most readily fall into this form of intemperance. The reason is patent on a slight consideration. Labour of the limbs and muscles betrays its effects by obvious exhaustion ; but mental labour seems so unlike what is called bodily labour that its bodily instrument—the brain—is forgotten, even if the connexion is not, as it too often is, unknown. The thinker, the writer, the speaker, are ignorant or forgetful that the brain with which they work is subject, and in still higher degree, to the same law of frequent alternation of exercise and repose as the rest of their bodily organs.\* Its very patient endurance is abused, its gentle warnings are unheeded, and too often irreparable injury is sustained before even its beginning is suspected. All professions—the bar, the pulpit, the press ; science and literature, politics and commerce, have each its long list of victims to an unenlightened ardour, to an impetuous zeal, not the less to be deplored because its objects are in themselves commonly innocent, or even praiseworthy. In our very universities and schools, before the race of life is well begun, the seeds of early decay and of premature debility are too often sown, and in those very youths whose lives are of the utmost value to their race. Such cases we must all of us have seen. But, alas ! their example is too often held up for imitation rather than warning ; and the “mysterious decrees of Providence” are too frequently invoked to explain what is but too easily explicable. It has been well said, that if we could with impunity violate the divinely-appointed conditions of our being, there indeed would be a mystery. Perfect health and long life in one student, who adds the night unto the day, and habitually disregards the claims of that part of his nature which, because it is the lower, is not the less, but all the more indispensable, would truly be a greater mystery, and even miracle, than the early

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\* “ Is it not curious that to write four or five hours a day for four or five successive days, wearies a man to a degree that ten or twelve daily hours of ploughing does not weary the man whose work is physical ? Mental work is much the greater stretch ; and it is strain, not time, that kills. A horse that walks at two miles and a half an hour ploughing, will work twelve hours out of the twenty-four. A horse that runs in the mail at twelve miles an hour, works an hour and a half, and rests twenty-two and a half ; and with all that rest soon breaks down.”—*Recreations of a Country Parson*, 1859, p. 117, c. iii.

death of a thousand such.\* It is earnestly to be wished that the lives of men like Kirke White, and of others nearer our own time that I could name, were re-written, and made to yield a new, wholesome, and much needed lesson.

There is a perverse spirit, of which most studious youths have had experience—a spirit which disdains what is called subservience to a material body, which exults in defiance of its demands, and seeks to soar into the empyrean unincumbered by the flesh. This spirit, the besetting sin of the aspiring, is not the less dangerous because it fills us with a certain sympathy and admiration. To take an illustration which falls far below the truth: What should we say of a horseman who, in his eager speed, in the consciousness of his own strength and freedom, should refuse to be restrained by the necessities of the animal he rides, should grudge it both rest and food, and ever goad it on to further and further effort? But the union of the mind and body is far more intimate and close than that between the horse and his rider, or even that between the man and the horse in the mythic centaur. We hear much still of mind triumphing over the ruins of its fleshly tenement, but what should we think of the logic of a man who, having lost his arms, cites his power of walking as a proof that they are not necessary? And so, on purely physiological principles, when the activity of the brain has survived, as for a time it often will, most extensive injury of other bodily organs,† when, perhaps, it is the very nature of the disease itself to produce excessive activity of brain, how shall we judge men who point to this result as an evidence that mind is wholly independent on the body? Mischievous delusion! for error is ever mischievous, however excellent the motives of those who prop it up.

Passing on to other things, I would ask, in spite of all we hear of ventilation and the necessity of fresh air, how often

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\* "God lays down certain physical laws. Upon His carrying out such laws depends our responsibility (that much abused word); for how could we have any responsibility for actions the results of which we could not foresee, which would be the case if the carrying out of His laws were *not* certain? Yet we seem to be continually expecting that He will work a miracle, *i.e.*, break His own laws expressly to relieve us of responsibility."—FLORENCE NIGHTINGALE, *Notes on Nursing*, p. 15.

† See *Appendix*, No. I.



and where, do we find rooms, either private or public, ventilated as they ought to be? In a vast majority of cases it is thought sufficient to provide for the admission of fresh air at certain intervals, as if one could lay in a stock of air as we can do a stock of provisions, of which the last morsel will be as good as ever long after the first or fiftieth has been consumed. Thus bed-room windows are opened faithfully during the day, and so far good; but, during the night, when it is that air is really needed, all apertures are closed, and the narrow space which the encroachment of large reception rooms has left is still further narrowed by ornamental curtains. How often do we find provision made for carrying off the fumes of burning gas? Gas-burners, indeed, are said, like our grates, to have chimneys; but where do these open and discharge their contents? A large "party" is most commonly the precursor of headache and languor, consequent on vitiated respiration and circulation, if not of what we call unmeaningly "a cold," in one or other form. The effects of heated air, polluted by carbonic acid and animal exhalations, which render it moment after moment less fit to sustain life, are little thought of even when they are felt. We are a practical people; we escape suffocation, and we are content.

Again: Is cleanliness, as a general rule, sufficiently attended to in any rank of life? Cleanliness, in its three degrees, 1st, of the body; 2d, of the clothing; 3d, of the house and its adjoining. Even among the rich and "educated," regular daily ablution of the whole body is still, I fear, exceptional. Some twenty-eight miles of tubing are perpetually discharging through the pores refuse matter on the skin.\* How many know this, or think of it, or act as if they knew it? It is

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\* "It is estimated that the number of sudoriparous glands is about seven millions, and the total length of their tubing about twenty-eight miles."—Dr. J. W. DRAPER, *Human Physiol.*, New York, 1856, b. i., c. xii. p. 237. The calculation is given by Dr. Erasmus Wilson, who includes in his estimate the sebiparous system with that of perspiratory glands and tubes. He says—"I have ascertained, beyond question, that the sebiparous system is the perspiratory apparatus of the greater part of the body, the true perspiratory glands and tubes being found only in certain parts. Therefore, the calculation which I have made on these premises must be considered as falling within rather than beyond the truth."—*Healthy Skin*, fourth edition, 1853, c. iii. p. 43, note. This view of the sebiparous system goes far to explain the discrepancy remarked by Dr. Andrew Combe (*Physiology applied to Health and Education*, c. iv.) between Dr. Wilson's estimate and that of Krause, cited by Wagner.

among the poor, of course, that uncleanliness, especially of the clothing, and of the dwelling, most prevails; but the poor form no small part of our total population; and the consequences are not confined to the poor, as fevers and cholera have taught us, or, perhaps, rather are only beginning to teach us.

Recent sanitary movements have shown us how much still remains to be done, and to be undone, for ventilation, for drainage, for the supply of pure water, of fresh air, and let me not forget to add, of light. In any of our large cities, who can visit the alleys and the courts, even in their improved state, without a shudder and a sickening of the heart?

After evils so vast, it may seem frivolous to speak of Fashion. Yet, truly, it is a mighty power. And if it be not our ally, it will be our foe. Long, long will it be ere our social customs and amusements are conformed to right reason. Look at our balls, advertised as they are every winter, to begin at ten o'clock at night, the real hour being later, at the very time when they should be drawing to a close, and when young persons should be preparing to recruit their energies by quiet sleep. But no! till three, four, and even five in the morning, in a heated and vitiated atmosphere, the excitement is maintained. Dancing, in itself a healthful and graceful exercise, loses its benefits, and becomes an evil. Ladies, thinly clad, face the chill morning air, whose cold they are too exhausted to resist, and retire to feverish sleep, prolonged far into the next day, to be followed by another and yet another such. I look at this question now not morally, but physiologically. Its moral aspect I leave to others.

As to dinner parties, I can but hint at their over-abundant provision for the stimulus of jaded appetite, and for overlaying mental activity with loads of meat and wine. After all, perhaps, they are less dyspeptic and to be deprecated, especially as they are exceptional, than the anxious, unsocial, and hastily bolted meals, of which we read as characterizing our transatlantic cousins.

Of Dress, who can fitly speak, whether it be of our hard, headache-giving hats, our ill-formed shoes,\* or of the scanty

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\* See *Why the Shoe Pinches*. By Hermann Meyer, M.D. Translated by John Stirling Craig, F.R.C.P.E., &c. Edinburgh, 1860.

bonnets, enormous skirts, and thin shoes,\* of that other sex which is strangely called the weaker, inasmuch as they manage to survive what few men could endure and live? If men were to wear their hats on the extreme edge of their occipital spine, in spite of east winds and neuralgia, to compress their thorax with cords, to encumber their locomotion by balloon-like nether garments, and walk the muddy streets in wafer-soles, the census returns would soon show a changed proportion of the numbers of the two sexes. Even Mrs. Inchbald, indeed, is said to have died from tight-lacing;† but it was at an advanced age; and only once do I remember hearing of an obituary notice like the following in a newspaper, and that was an American one:—"Died, at No. —, in — Street, Miss —, aged 18, of thin shoes."

Mr. Thackeray lately alluded to the havoc wrought in a former generation, by the plastering of pigments, white and red, on ladies' faces; but in our own journals we have advertised a much more fatal invention for producing brilliance of eye, by means of *belladonna*, with the not distant risk of blindness as the result.

Look at the number, still too great, of schools,—I beg pardon,—of academies, where young ladies are educated within an inch of their lives, perfected into paleness, and accomplished into spinal distortion and pulmonary phthisis.‡

But it is time to break off this dismal catalogue. In brief, *Health* is much more an ideal than an actual state among even the best of us. It is an abstract standard, towards which we approach more or less nearly, or rather from which we recede more or less remotely, but which none of us reach, though, in answer to the kind inquiry of our friends, we may say that we are quite well. Our normal level of vitality is low; and it is only when we sink beneath *that* that we consider ourselves ill; but of anything above it we have no conception, except, per-

\* Since these words were first written, strong boots, à la Balmoral, have come into vogue; but we may confidently expect that the cycle will soon again revolve. Fashion, at least, if not history, moves in what Vico calls "*ricorsi*," and their period is short.

† *Life of Mrs. Inchbald*, p. 262. Leigh Hunt, who quotes the passage in his *Old Court Suburb* (vol. i. p. 121, c. vi. 1855), remarks: "We have dwelt a little on this point as a warning, if tight lacers can take warning. We almost fear they would sooner quote Mrs. Inchbald as an excuse than as an admonition."

‡ See Dr. A. Combe's *Physiology*, &c., c. vi.

haps, when, once a year, we spend a fortnight in the country, climbing the hills, inhaling the fresh breezes, purchasing sweet sleep with muscular fatigue, seasoning our plain diet with a mountaineer's appetite, and learning for at least a brief time what it really is to *live*. Let the strongest among us only deduct from his waking hours of active work the number of those cut off or crippled by coughs, or colds, or headaches, or toothaches, or side-stitches; by indigestion, by nausea, by nervousness, or by that comprehensive ailment which the French denominate *malaise*, which, if it does not drive us to bed, makes the whole system languid, depresses the spirits, and converts work into drudgery, "the grasshopper into a burden,"—deduct, I say, these hours, and we shall be startled to find how small is the sum total of our profitably active existence.

Now, if I am asked how I propose to remedy, or rather to try to remedy these evils, I answer, that I know, and can conceive, no other means than that of rendering a knowledge of the conditions of health general, nay, universal, among our people. That this can be done would soon be clear enough, if only we were first agreed that it ought to be attempted; and year by year, while we learn to rely less on what can be done for men by any extraneous power, does our estimate increase of what it is possible for men to do for themselves. But as the first step are needed instruction as to the reason *why*, and the method *how*,—and training which shall dispose to act on the knowledge thus conferred.

If we are convinced that this knowledge is desirable, it remains to inquire when, and how, at what period of life, and in what manner, can it best be imparted. On the time and manner much of its efficacy must obviously depend.

As to time, I answer, at the earliest possible or fitting age. What that is may vary with circumstances, and it is not necessary precisely to define it. In all cases, however, it will fall within the ordinary school period. In favour of the earliest fitting age, there are two strong reasons. 1st, It is in early life that the faculties most required are most active; 2d, As the men and women of this day are the heirs of their own past, and bear in their own persons the blessing or the curse of their



youth and childhood, instruction comes too late after injury more or less serious has been already sustained, when habits have been formed, when attention is otherwise engrossed, and when, moreover, the faculties required may have become dull from want of exercise. While the period of youth is most exposed to the danger of transgression, it happens that at no season of life does the punishment follow the offence more slowly. Exulting in their strength, the young fail to associate with themselves the idea of the ailments which they hear of in older persons. To them dyspepsia and brain-disease are practically as mythical as the sores of Philoctetes. Eat what, and when, and how much they may,—work their brains how they may, they suffer nothing at the time; and they have yet to learn that Nature, as it were, runs up scores, gives long credit, but always on the best security for prompt payment on demand, and with an accumulation of interest adjusted accurately to the length of the delay. It has been said, that “the young in years may be old in hours;” but this saying has a double meaning, and he who compresses thirty hours of labour or of enjoyment into the twenty-four, or ten days into the week, or six weeks into the month, or fifteen months into the year, will just have, in general, the fewer days and weeks and months and years to live, with this terrible aggravation, that even those still spared to him will be embittered and enfeebled by past transgression, whose consequences, alas! are not past. I have sometimes thought that Virgil’s harrowing description of the cruelty of Mezentius, who bound together the dead and the living, face to face and breast to breast, hand to hand and foot to foot, is typical of the fearful union of our dead past with our living present; of the dead self, not to be shaken off, however loathed, which cramps and corrodes and corrupts our struggling and heaving life. Is it not a worthy effort to save, by anticipation, our younger brothers and sisters from this terrible entanglement? Which of us, having received what is called a “liberal education,” can look back without a groan on the dreary season of his school-life, and think of the errors and suffering he might have escaped had his years been spent, not in pretending to learn what he never knew, or has since forgotten, or what, at best, he might have learned with

double benefit and pleasure in half the time, and with half the toil; but in acquiring what it so vitally imports that all should know, and what the youthful mind appropriates as easily as does the body its fitting food.\*

The next question, "How is this instruction to be best given?" is the meeting-point of the two tendencies of which I spoke at the outset,—the *adaptive* and the *expansive*. At this point the two desiderata meet and blend. A useful subject may be taught in an unintellectual, unimproving, even a narrowing way. But all subjects, by being so robbed of their inner use, lose much of their outer also. This is especially true of the subject now in question. It will scarcely confer much sanitary advantage if not so taught as to yield its proper mental fruit. As regards even the former, it is vain to issue arbitrary precepts, however just, about air and exercise, and temperance, and so forth;† to commit to memory verbal directions, however sound. Such an educational edifice is built on sand, and the first and slightest blast of temptation will overthrow

\* "I remember hearing a distinguished man, who was suffering under physical weakness, say, that when he was a boy he was instructed concerning the solar system, and every other system, except his own system!"—R. C. WATERSTON, *Thoughts on Moral and Spiritual Culture*, 1843, Introd., p. 9.

† The Rev. Sidney Smith says to his parishioners: "Never sit in wet clothes. Off with them as soon as you can; no constitution can stand it. Look at Jackson, who lives next door to the blacksmith, he was the strongest man in the parish. *Twenty different times I warned him of his folly in wearing wet clothes. He pulled off his hat and smiled, and was very civil, but clearly seemed to think it was all old women's nonsense. He is now, as you all see, bent double with rheumatism, is living upon parish allowance, and is scarcely able to crawl from pillar to post.*"—*Memoir*, vol. i. p. 338. But why should the warnings which so signally failed with Jackson succeed better with others? Jackson's example, doubtless, was worth something; but even that, I fear, would not suffice. Well does Mr. G. H. Lewes say: "No scientific subject can be so important to man as that of his own life. No knowledge can be so incessantly appealed to by the incidents of every day, as the knowledge of the *processes by which he lives and acts*. At every moment he is in danger of disobeying laws which, when disobeyed, may bring years of suffering, decline of powers, premature decay. Sanitary reformers preach in vain, because they preach to a public which does not understand the laws of life—laws as rigorous as those of gravitation or motion. Even the sad experience of others yields us no lessons, unless we understand the *principles* involved. If one man is seen to suffer from vitiated air, another is seen to endure it without apparent harm; a third concludes that 'it is all chance,' and trusts to that chance: had he understood the *principle* involved, he would not have been left to chance—his first lesson in swimming would not have been a shipwreck."—*Prospectus of the Physiology of Common Life*, 2 vols. 1859.

To the same effect says Mr. Arthur Helps: "Suppose there were the simplest knowledge with respect to air and water universal amongst mankind; how easy then, comparatively speaking, would be the work of sanitary reform! But now the difficulties of addressing the world upon any such subject are great; because, what is certain and elementary to one class, is far advanced, hard to understand, and seemingly problematical, when addressed to another."—*Friends in Council*. N. S. 1859. Vol. ii. p. 152, e. vii.



it. The precepts must be deduced inferentially from the study of the human structure itself. The facts must be learned that the principles may be understood; the principles must be understood, that the law may be revered; and the law must be revered, that it may be obeyed. Or, to invert the order: The law to be obeyed must be revered; for the law to be revered, the principles on which it is founded must be understood; and these principles cannot be understood if the facts from which they are derived are unknown. The engineer may as safely dispense with the study of the mechanism he is to guide as man hope to obtain an available and operative knowledge of the laws of health without a knowledge of that structure, the true working of which constitutes health. Health means wholeness, entireness, completeness; it is even the same word as *wholeness*, as *wholesome* shows. In the moral world also, *integrity* from the Latin, and *holiness* from the Saxon, both mean *entireness*. So truly do disease and vice break up into discordant fragments the unity of man's nature, whether physical or moral. For health, then, is indispensable the harmonious co-operation of all the several parts, each sound in itself, and each sympathizing with the rest. The body may be compared to a chain, the strength of which as a whole cannot exceed that of its weakest link, for there it will break, and wheresoever that broken link may be, the sustaining power of the chain is gone.\* But even this comparison falls short of the truth. For, in a chain, one link may be long unsound, while all the rest are sound; there is no tendency in the unsoundness to diffuse itself; and the sudden strain which bursts the chain as a whole will find the other links as strong as ever. But in the animal body the unsound link affects, sooner or later, more or less, the sounder links also. The diseased stomach impairs the action of the lungs and heart; diseased heart or lungs impairs the stomach's action; each acts and re-acts on the other organs with mani-

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\* An ingenious application of this principle has recently been suggested. It being intended to run a single telegraphic wire between the Prince's Landing Stage at Liverpool and the north reserve at Birkenhead, "this line will be made weaker than usual at one particular point, so that, should the wire break, it will always be at one place, and the injury can thus easily be remedied."—*Manchester Examiner and Times*, 3d February 1860.

fold and intricate reciprocity. It is impossible for me here to illustrate this position in detail; but this it is the great business of teaching to illustrate and to enforce.

Now, that this kind of teaching can be effectively given to the young no longer admits of doubt. It is now a practical fact, not a theoretical suggestion. Of its tendency to promote the observance of health-conditions I will speak hereafter. But, as I have said, this is not its only, perhaps not even its highest, advantage. It trains the observing powers; it gives nothing on authority or trust; it appeals to the pupil's own senses and own experience. Through observation it trains to reflection, to careful comparison of phenomena, and lifts from the watching of details to the comprehension of principles.

It has not been sufficiently enforced that, when Bacon laid down the true basis of philosophy, he at the very same moment proclaimed the true theory of education. The same principle, the same order, the same method, which lead to the discovery of truth, ought to guide us in its inculcation upon others, and especially on the young. First come observation and comparison, then generalization and classification. Such is the law of the development of the individual mind, as well as of the progress of philosophy or science.\* Unfortunately, in education, we commonly reverse the process. We leave the child's observing powers to starve or to feed on chance diet, and we cram its memory with our ready-made conclusions, which it is required to repeat in exact verbal form. We do nothing to train, and much to suppress, the powers of observation, while they are yet strong; we overtask and overlay the powers of reflection while they are yet weak, and to the lasting injury of both; we train up erudite parrots, not well-equipped intelligences; not even *automata*, but *heteromata*, to use Archdeacon Hare's wise distinction, for *automaton* really means something self-moved;† and, when the process is com-

\* "Those things which are first to nature are not first to man. Nature begins from causes, and thence descends to effects. Human perceptions first open upon effects, and thence, by slow degrees, ascend to causes."—JAMES HARRIS, *Hermes*, 1751. B. i. c. 2, p. 9.

† "Is not man the only *automaton* on earth? The things usually called so are, in fact, *heteromata*."—*Guesses at Truth*, first series, 3d edition, p. 266.

plete, what we have misdone has to be undone, if indeed it be not too late.

Further, it is only by the study of the human organization that vital unity can be given to the scattered fragments of natural history which are everywhere finding their way into even primary schools. Man is the type, at once the summit and the centre, of animated beings, and only from the study of his structure do other studies, such as zoology, and even botany or vegetable physiology, derive their best interest, utility, and application. When the human structure has once been mastered, a standard is erected from which it is a work of absorbing interest to trace the infinite diversity of modification and adaptation to diverse circumstances throughout the lower orders of being.

But it is not only from the individual to the special, from the special to the general, that this study trains the young to rise in subjects the most interesting because the nearest to themselves; external to their minds, and yet mysteriously united with them. It teaches the connexion of cause with effect; it interprets the phenomena it points out, and unfolds the reason or final cause.

"In the sciences of the *inorganic* world," says Paget in an admirable lecture, "we can learn *how* changes are accomplished, but we can rarely tell *why* they are; in those of the *organic* world, the question *why* can be often answered; the question *how* is generally an enigma that we cannot solve."\*

From the exhibition of final causes which meet us at every turn, it is scarcely a transition to the one sole efficient cause. Let us not confound the logical value of *design* as an argument for the divine existence, with the tendency of its exhibition to inspire reverence and gratitude to Him whose existence needs not to be proved. It is the latter only that concerns us; the former we may well leave to others. And when this study is properly directed, where else do we find this tendency more striking and more uniform? It has been said that an undevout astronomer is mad; but the very grandeur, vastness, and distance of his subjects are apt to crush the mind

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\* *On the Importance of the Study of Physiology as a Branch of Education for all classes.*  
By James Paget, Esq., F.R.S. 1854.

with a consciousness of human insignificance in the presence of those infinite spaces, and to extort, as of old, the exclamation: "What is man that thou art mindful of him, or the son of man that thou visitest him?" It is in our own structure that we see most clearly and most abundantly tokens, not only of divine wisdom, power, and unity, but of divine goodness and paternal care. True, those traces are not confined to the human, but pervade the whole animal structure, even in its lowest forms. But while this fact teaches us mercy—so well styled "humanity"—to the lower animals, who are indeed, like Burns' mouse, our "fellow-mortals," surely we need fear no comparison with them in the attributes of reason, conscience, and immortal hope. The Rev. Sidney Smith says, with his usual clear sound sense:—

"The weakest and the most absurd arguments ever used against religion have been the attempts to compare brutes with men; and the weakest answers to those arguments have been the jealousies which men have exhibited of brutes." \*

If Medical Schools have not hitherto been remarkable for reverence, it is partly because medicine has been too exclusively studied as a craft; still more because they inherit the coarseness and moral callousness of our junior schools. If the young mind grows up without the lesson, it is less impressible in after years, when familiarity has produced, if not contempt, at least indifference.

In fine, it seems to me at least, this study, over and above its sanitary uses, tends most powerfully to train at once the observing and the reflecting powers—the moral and devotional sentiments of our nature—and to blend them all in harmonious and beneficent co-operation.

The time that still remains to us cannot, I think, be more profitably employed than in replying to a few of the chief objections which have been, or may be, brought against the general diffusion of that kind of knowledge, of which I have endeavoured to set forth the nature and the use. These objections are often not less really operative, because they do not always assume a verbal form, but lie latent in the mind.

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\* *Lectures on Moral Philosophy.* Lect. xviii. p 273.



1. It is thought by many that there is danger lest this instruction should lead people to believe that they are competent to treat their own diseases. This, if real, I would admit to be a serious evil; but I believe the tendency to be precisely in the opposite direction. It is the ignorant, and just in the measure of their ignorance, who are the most likely, *1st*, to neglect the early stages of their incipient maladies; *2d*, to attempt medically to treat themselves; *3d*, to rely on popular and indiscriminate recipes; and *lastly*, to call in aid some empiric, who makes up in pretension and promise what he wants in knowledge and in skill. The more one knows of the bodily structure, the more firmly must one be convinced that it is far too complex to be safely treated, in case of derangement, by any who have not made disease their special and profound study, and who have not added thorough scientific training and ample medical experience to natural talents both of observation and of thought. It is an old saying, that he who acts as his own lawyer has a fool for his client; it is not less true, that he who acts as his own physician has a fool for his patient. Even a physician, when he is ill, usually calls in the aid of a professional brother;\* and he who best understands the normal working of his bodily system will be most likely to detect the first symptoms of a coming ailment,—to allow it no time to gather strength,—to invite the services of the well-qualified practitioner,—to rely on his advice,—and lastly, to give effect to the treatment, by avoiding all that can interfere with its success. For, be it observed, even when a physician is consulted, his efforts are too often apt to be thwarted by perverse meddling on the part of friends or nurses, or of the patient himself. I have here a declaration, signed by sixty-five of the most eminent medical men in London,† to the following effect:—

“Our opinion having been requested as to the advantage of making the

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\* “Ne savez-vous pas qu’un médecin malade est le plus triste médecin de soi-même; que, dans cette circonstance, son instruction et son grimoire lui deviennent complètement inutiles, et qu’il doit alors avoir recours aux lumières d’un de ses confrères, parce que, intéressé dans la question qui s’agit, il a perdu son *sang froid*, et ce sixième sens si précieux que j’appelle le *diagnostic*: ainsi cette sentence formulée—*Médecin, guéris toi-même*—n’est elle pour nous tous qu’une amère ironie.”—*Manuel de Baigneur*; par M. le Dr. Paul Vidart de Divonne. Genève, 1853. P. 8.

† *Vide* Appendix, No. II.

elements of human physiology, or a general knowledge of the laws of health, a part of the education of youth, we, the undersigned, have no hesitation in giving it strongly in the affirmative. We are satisfied that much of the sickness from which the working classes at present suffer might be avoided; and we know that the best directed efforts to benefit them by medical treatment are often greatly impeded, and sometimes entirely frustrated, by their ignorance and their neglect of the conditions upon which health necessarily depends. We are, therefore, of opinion, that it would greatly tend to prevent sickness, and to promote soundness of body and mind, were the elements of physiology, in its application to the preservation of health, made a part of general education; and we are convinced that such instruction may be rendered most interesting to the young, and may be communicated to them with the utmost facility and propriety in the ordinary schools by properly instructed schoolmasters."

This document well deserves the attention of all who are apt to sneer at and slander the medical profession, not knowing that the foremost in all efforts to remove the sources of disease are ever those very men who are sometimes said to have a selfish interest in leaving them intact, inasmuch as it is by the treatment of disease they live.

Further, we cannot too carefully distinguish between the *treatment of disease*, and the *preservation of health*. The former is the business of a class of men; the latter of every human being. The former requires vast knowledge, experience, and skill; the latter, in general, needs only the clear comprehension of a few simple principles; and in the vast majority of cases, a little knowledge may prevent what the profoundest knowledge may be incompetent to cure.

2. It may be objected that too much is expected from this kind of instruction; that in individual cases it is inoperative, as in the instances, often cited, of medical men, who, in their own persons, often disregard the laws of health. To this objection various answers may be given. It may be truly said, that hitherto the nature and method of medical instruction, and the purpose for which it has been either given or received, have not been favourable to the end desired. Anatomical and physiological knowledge has been, till very recent years, far too exclusively directed to the treatment of disease, that is, to the restoration of health lost, and far too little to the preservation or improvement of health possessed. It has been wholly confined to medical men, and they have acquired it



with a peculiar and professional aim; they have been engrossed with its *curative*, to the neglect of its *preventive* power.\* To the latter their attention was not directed either in their own persons or in those of others; and to it their thoughts did not spontaneously turn. It was not more uncommon for medical than for other students to injure their health by over-study and other errors, without any consciousness of what they were really doing; it was "not the business" of their teachers to advise or caution them on this head; and so they purchased the power of ministering to the health of others by no small damage to their own. Without insisting more minutely on defects in the old mode of teaching, which a new race of teachers is fast removing, I would merely refer to the fact, that till the times of the Combes, Southwood Smith, Grainger, Guy, Toynbee, Sutherland, and others, men of our own day, and almost all still living, the subject of Sanitary Reform was little, if at all, discussed. Nor had it dawned upon the general mind that the medical profession were guardians of the public health in any other sense than as "medicine-men," paid to treat diseases when they occurred. *Cure* was their great business; *prevention* was scarcely within their sphere.† That medical men should thus, in common with others, neglect their own health, is not wonderful or difficult to explain.

As regards the community at large, we must not argue from isolated cases to the probable effects of any instruction which shall become generally diffused. This same fallacy appears in various forms. Thus it used to be said that if working men were taught to write, or even to read, they would become "conceited." Even if we were to admit that an individual may be made "conceited" by instruction which is *peculiar* to himself,—let but the instruction become *univer-*

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\* Yet Cardan, himself a physician, said three hundred years ago: "Verum cum medicinæ duæ sint potissimum partes, altera quæ præsentem tuetur sanitatem, altera quæ absentem revocat; hæc tantum potiore eam medicinæ partem diligenter tractemus, atque excolamus quæ sanitati tuendæ producendæque dicata est."—HIERON. CARDANUS, *De Sanitate Tuendâ Proem.*, p. 3.

† "I have conceived the function of a physician as the teacher of a form of natural religion, consisting in a reverential obedience to the laws of nature, or, in other words, to God's will as manifested in organized and unorganized matter."—*Scarsdale*, vol. i. p. 37, c. ii. 1860.

*sal*, and conceit on this ground is impossible. And so is it with the instruction now in question. Teach a single lad here and there, for example, the physiological effects of intoxication, and send him forth into a society of uninstructed drinkers, and we have no right to wonder at what may follow. We are not entitled to reckon on the ability of an individual to resist the tide of general opinion and general example. It is much more likely that he will be absorbed by the mass, than that the mass will be changed by him. But just in proportion as we increase the number of persons so instructed, do we help to change the general opinion, and reverse the general example; to convert the sober, temperate minority into the sober, temperate majority; still further, to make sobriety and temperance universal. The example and opinion which were a hindrance thus become a help. It is surely unreasonable to decline to do anything, because we cannot do all at once. Time is an element which eager reformers are apt to overlook; but if they overlook, or make light of it, when their own schemes are involved, they make amends by casting it as an objection in the way of every prescription but their own. In few things can we justly expect a very rapid progress; and we must often be content to take obvious tendency as the best evidence and measure of ultimate result.

So inconsistent, sometimes, are objectors of this class, that I remember to have read an article in which the introduction of this kind of teaching into our poorest schools was resisted upon two grounds—1st, because it is inoperative; 2d, because it would give poor children who should receive it an advantage over rich children who do not! An argument, of which the second part knocks out the scanty brains of the first, and then dies itself from want of vital force. Surely if the instruction of the poor is in any respect superior to that of the rich (as I, for one, believe it not uncommonly to be), the remedy is to be found in the improvement of the latter, not in the curtailment of the former. It is, indeed, by this very pressure from below that we may expect most confidently that our higher school systems will be reformed.

3. It is sometimes said, and oftener thought, that this study makes too much of the body, to the disparagement of “*spiri-*

tual things." It is, perhaps, too common among religious persons to make light of the body, that marvellously constructed tabernacle in which men sojourn on the way to their enduring home.\* Let us take an extreme instance. The Rev. Thomas Binney, in his book, "Is it possible to make the best of both Worlds?" says,—“I remember a man who thought it sinful to use a tooth-brush! It was walking in a vain show, and bestowing more than was meet on what belonged to a poor, perishing body” (p. 128). Such a case as this is perhaps rare; yet the same spirit operates in ways less ludicrous, but still more pernicious. Do we, we may well ask, honour the maker by despising what he has made? or the giver, by disparaging his gift? If a friend had given or lent to us a delicate and ingenious instrument, such as a telescope or electrical machine, would he not expect that we should use it carefully and keep it in good order, not neglect or let it rust, or wantonly impair it? Our body is, on the very lowest estimate, such an instrument given or lent to us by its Author, for our use or abuse of which we are all accountable. And a miraculous instrument it surely is, or rather a combination of many very diverse instruments, which act as one. “A harp of twice ten thousand strings,” it has been styled. The eye is microscope and telescope in one;—the small and the distant are both within its range! The nervous system is stranger than any galvanic battery or electric telegraph! The best chronometer is not more wonderful than the heart, with its four thousand beats an hour for seventy or eighty years.

Are St. Paul's words forgotten? “I beseech you, brethren, that ye present your *bodies* a living sacrifice, holy, acceptable unto God, which is your reasonable service” (Romans xii. 1). Is the body, then, unworthy of our care, our study, our reverential contemplation? Would we rather consecrate to God's service a sickly, feeble, and disordered body, or a body strong, healthy, active, vigorous? “Cleanliness,” says the

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\* “Etsi enim nos Christiani ad terram promissionis perpetuo aspiremus et anbelemus; tamen interim itinerantibus nobis, in hac mundi eremo, etiam calceos istos et tegmina (corporis scilicet nostri fragilis) quam minimum atteri, erit signum favoris divini.”—BACON, *Historia Vitæ et Mortis*. Opera, vol. viii. p. 337, 1824.

proverb, "is next to godliness."\* Does this refer solely to the washing of the hands or face, or even of the whole skin? Is not the proverb more true of inward purity,—the absence of defilement by excessive or improper meat and drink,—the abstinence from evil passions and indulgences, which, through the body, corrupt the soul?

It is true there are higher things than the body; and for the sake of those very higher things must the body be diligently tended. Occasions do arise when it is a duty to disregard considerations even of health in fulfilment of a higher law. The son or the daughter must spend sleepless nights beside a parent's sick-bed. The physician must expose himself to the risk of infectious disease. The soldier must not hesitate to mount "the imminent deadly breach." High born ladies leave their home and friends to tend the sick and wounded in a foreign land, rendering the lowliest offices in the loftiest spirit,—“familiar acts made beautiful by love.” Such occasions do arise. But how are even these best provided for? Is it by wasting, or by husbanding, in ordinary times the stock of health and strength on which an unwonted draught may some time be made? Were it only to meet such exigencies, we must not, so to speak, live up to our income of bodily health; we must, as it were, establish a reserve-fund, on which we may safely draw in the hour of sorest need or of most imperious duty.

I have now before me a book which it is, I think, impossible to read without emotion. It is entitled, "*Les Adieux d'Adolphe Monod à ses Amis et à l'Eglise.*" Prefixed is a portrait of that noble Christian minister as he lay on the bed of sickness to which his own over-zealous labours had doomed him, and from which he never rose. On twenty-five successive Sundays, in spite of his severe sufferings, he gathered round him, as he lay, a small circle of his dearest friends, and having

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\* "L'on peut dire sans exagération que si le peuple avait ses mains plus propres, il les aurait plus pures." ("If the people had cleaner they would have purer hands")

Troisième Compte Rendu des Travaux de la Société Paternelle, Colonie Agricole de Mettrai, 1842.

"I have observed that clean people always look happy, and that happy people are always kind-hearted, and vice versa.—GEORGE MELLY, *School Experiences of a Fay.* &c., 1854. C. 2, p. 13.



partaken of the Lord's Supper with them, he addressed them in words of consolation, of resignation, of pious gratitude and hope. In one discourse he says: "My declining strength does not permit me either to rise or turn, and it is only in this position that I can remain and speak. I hope to speak distinctly enough to be heard by all." And at the outset of that which I am about to quote, he says:—

"My strength is exhausted, my dear friends, and this time I asked myself if I ought not to be silent. But I will say what I intended to say, though I can do no more than indicate my thoughts."

When I look at this faithful portraiture of the face I have so often gazed at in the pulpit, I seem to hear his well-known voice utter these words, which, as the utterance of a good man dying, may well sink into our hearts.

"And the body, let us not neglect it. Bad health, a feeble body, is often a great obstacle to the accomplishment of our work before God. We ought to accept it when God sends it. But it is our duty before God to observe the regimen needful even for the body, and to take the precautions necessary to strengthen it for the service and for the glory of God: this thought exalts and sanctifies everything. There are many men who would have been able to do much more than they have done for the glory of God if they had not given way to an activity more pious than judicious, which has worn them out while yet young; and those who die early have to inquire whether they have not reason for self-reproach, whether they have not neglected certain precautions, simple, and in themselves easy, but in which it is difficult to persevere, and which would have permitted them to labour longer in the service of God."\*

A solemn warning, surely applicable far beyond the limits of the clerical profession.

Once more, it is true there are higher things than the body; but, as Rousseau says, in words that cannot be too often quoted: "The stronger the body, the more it obeys; the weaker the body, the more it commands,"—a paradox of profound wisdom! For it is the strong body that most deftly and nimbly serves the spirit; the ailing body drags down the spirit with it to the dust.† It has pleased the all-wise Creator

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\* *The Regrets of a Dying Man*, p. 113.

† "Corpus enim, si valeat male, parere nequibit  
Præceptis animi magna et praeclara jubentis."

MARCEL PALIEN., lib. x.

"Volumes are now written and spoken upon the effect of the mind upon the body. Much of it is true. But I wish a little more was thought of the effect of the body on the mind."—FLORENCE NIGHTINGALE, *Notes on Nursing*, p. 34.

to make our higher faculties dependent, in this life at least, on the physical organs through which they work; and it is more truly pious in us to accept this ordinance meekly, and to act under it wisely, than to put the figments of our ambitious imaginations in the place of demonstrable truth.

While, then, we ourselves strive to act on these principles, let us teach to do likewise those who have been, or may be, intrusted to our influence,—the young, on whom the life-career is opening, and whose future is untrammelled and untainted by an irremediable past. Let them learn from us to exercise their bodies wisely, to inhale fresh air, to be moderate in diet and temperate in all things; in short, to understand and to obey the conditions on which the body's health depends, even that their minds may be vigorous and healthful, their dispositions kindly, their tempers even, their thoughts pure and clear. For, in the words of a poet of our own day :

“ For that which *serves* our fleshly need  
    *Subserves* the blossom that doth feed  
The soul, which is the life indeed.”\*

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\* SIDNEY DOBELL, *England in Time of War*, 1856, p. 80.



## LECTURE II.

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# ON THE CONDITIONS OF WEALTH EDUCATIONALLY CONSIDERED.

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“ God first assigned Adam maintenance of life, and then appointed him a law to observe. True it is, that the kingdom of God must be the first thing in our purpose and desires ; but inasmuch as a righteous life presupposeth life, inasmuch as to live virtuously it is impossible, except we live ; therefore, the first impediment which naturally we endeavour to remove is penury and want of things, without which we cannot live. Unto life many implements are necessary ; more, if we seek (as all men naturally do) such a life as hath in it joy, comfort, delight, and pleasure.”

HOOKER, *Ecclesiastical Polity*, b. i. c. x. 2.

“La Science Economique est l'étude et la demonstration des loix de la nature, relatives à la subsistence, et la multiplication du genre humain. *L'observation universelle de ces loix* est l'intérêt commun et général de tous les hommes. LA CONNAISSANCE UNIVERSELLE DE CES LOIX est donc le préliminaire indispensable et le moyen nécessaire du honneur de tous.”—EPHEMERIDES, *Du Citoyen*. 1769. No. II.

“Another step towards the direct instruction of the people would be the communication of the knowledge of those natural laws which chiefly determine their condition to all persons destined to be teachers in schools for the children of the working-classes. . . . Considering the present position and temper of this portion of the nation, and the prospect of their future political power, it is more important that the rising generation among them should understand clearly what gives them high wages, what makes their wages low, and what would prevent them from getting any wages at all, than that they should be able to pass the most satisfactory examination in geography or astronomy. *Not that the latter kind of knowledge is not useful, but that the former is indispensable.*” —C. MORRISON, *An Essay on the Relations between Labour and Capital*. 1854. C. 23, p. 287.

“So long as the bulk of the people are unacquainted with the elementary doctrines and conclusions of economic science, so long must they continue wholly ignorant of the principal causes of national wealth and national poverty, and, consequently, of the circumstances which really determine their condition in life. . . . Ignorance is the impure and muddy fountain whence nine-tenths of the vice, misery, and crime to be found in the world are really derived. Make the body of the people once fully aware of the circumstances which really determine their condition, and you may be assured that an immense majority will endeavour to turn that knowledge to good account. . . . The harvest of sound instruction, though late, will in the end be most luxuriant, and will amply reward the labours of those who are not discouraged in their patriotic efforts to make education embrace objects of real and palpable utility, by the difficulties and obstacles they must expect to encounter in the commencement and progress of their labours.” —J. R. M'CULLOCH, *Discourse on the Rise, Progress, &c., of Political Economy*. Edinburgh, 1824. Pp. 80, 82, 83.

“Let it not be said that, in thus arguing the case, I am substituting a principle of selfishness for one of duty. It is not so: prudence is here an obligation of morality. Providence has annexed the penalties of suffering and distress to a violation of its sanctions, and has evidently designed that men should be influenced by the apprehension of those penalties. And things are so ordained, that observance of the laws of individual prudence becomes the best and only safe rule for the attainment of the general well-being. The true interests of individuals and of the community coincide.”—*Population and Capital*. By G. K. RICKARDS, M.A., late Professor of Political Economy at Oxford. P. 204. L. viii. 1854.

# THE CONDITIONS OF WEALTH

## EDUCATIONALLY CONSIDERED.

ON a former occasion I had the honour to address the members of this association on "The Conditions of Health Educationally considered." This evening I have to speak of the Conditions of Wealth similarly viewed. The task which I then attempted was easy compared with what now lies before me. I had then to contend, at worst, with the *vis inertiae* which resists all new things till time has made them old, when it takes its stand as firmly upon them as before it did on those which they have displaced, and with the indifference that needs only to be roused to observe what has long lain before its eyes. To-night, however, I have further to do battle with misconceptions and with misrepresentations, I do not say wilful, but springing, as I think, from prejudice and ignorance. On no subject, probably, is confused thought so prevalent and so inveterate as on this; and partly for the very reason that it concerns us all too nearly to allow us to have no thoughts about it. Of the binomial theorem we may have no true conception without necessarily having false conceptions. There the mind may be a blank. But, regarding our social relations, we must have thoughts, or, at least, phrases which pass for thoughts; and these are oftener derived from hearsay or from hasty impressions than from candid and patient reflection. The difficulty and the importance of correcting erroneous, and clearing up confused, opinions on this subject are thus directly proportioned to each other.

At the first glance, a contrast strikes us between the two subjects,—that which we have been, and that which we are now, considering. Every one in words admits, or, at least,

no one denies, the importance and desirableness of *health*; while in deeds most of us are negligent of its conditions, and too many live as if these concerned their fellow-men only, and not themselves. But, as to *wealth* (taking the term in its vague popular sense), the case is in great measure reversed. Most of us, especially at certain times and in certain places, concur in denouncing wealth as the source of all social evil; while most of us as fully concur, practically, in the pursuit of it by one or other means. If, in the former case, we neglect what we commend; in the latter, we seek what we condemn. Now, it is always ill with us when our practice and our theory, or our professions, are glaringly at variance,—whether it be that our theory is right and our practice wrong, or the reverse. There is little good possible for us without, at least, an earnest effort to make our conduct square with our convictions, and our professions with both. A man divided against himself cannot stand any more than can a house divided against itself. Wholeness, integrity, consistency, harmony, are the foundations of both bodily and mental soundness. It is a principle in logic that two contraries cannot both be true, though they may both be false. And so, when our theory and our practice are opposed to each other, they may both indeed be false; but it is impossible that they should both be true. As to our professions, they may be classed, in one respect, with theory, in another with practice. Considered as the verbal expression of opinion, they belong to theory; but inasmuch as we influence others, while we utter ourselves, by word as well as by deed, they have an important relation to practice. Now, in the case of *health*, we cannot doubt that it is our practice that needs amendment rather than our theory, which requires only to be better established and made clearer in our minds. But how stands the case with *wealth*? That is the inquiry with which we have this evening to deal. If we discover that wealth is really an evil, let us strive to shun it, as well as to condemn it. If we discover that it is really a good, let us not be ashamed to praise, as well as to pursue it. If we find that it is partly, and in some relations, a good, and partly, and in other relations, an evil, let us seek to understand clearly what these relations are; and if we



arrive at an intelligent conclusion, let us endeavour to guide thereby our own conduct and also our instruction of others.

At the outset, then, what do we understand by *wealth*? Popularly, as you know, it is used to denote large possessions in the hands of this or that individual. The word suggests the names of such men as Baron Rothschild, the Marquis of Westminster, Lord Overstone; it calls up visions of carriages and horses, and silver and gold plate, and splendid mansions and trains of servants, with unlimited command of money. Without, however, here attempting any strictly scientific definition, or making any subtle distinctions, suffice it to say, that by *wealth* we must understand abundance of the necessities, comforts, and refinements of life diffused throughout the whole community. Thus Adam Smith entitles his great work "The Wealth of Nations." In this sense we can, at least, conceive of a wealthy nation in which no individual should be immensely rich; and, on the other hand, in fact, we find great individual wealth co-existent with wide-spread destitution and misery among a people. Wealth, then, which literally means *weal* or *wellbeing*, denotes general weal or wellbeing in the way limited as now explained.\* Of the relation between this and other forms of wellbeing, I shall hereafter speak. Meantime, I may perhaps be allowed to say, in the words of the Rev. Dr. Chalmers:—

"Short of the question which touches the good of their immortality, we know none more interesting than those which bear on the temporal wellbeing of the people; and we cannot imagine a more deeply important inquiry relative to any interest on this side of death, than how to elevate, by means of well-paid industry, the general platform of humble life, so that the ground-floor of the social and political edifice shall be overspread with a well-conditioned population."†

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\* In estimating the wealth of a nation, says Archbishop Whately, we must be careful—1. To bear in mind the condition "in proportion to the population;" 2. "Not to compute it according to that of the richest individuals it may contain."—*Introd. Lect. to Pol. Econ.*, second edition, pp. 188, 189.

"La richesse, prise dans son ensemble, c'est la possession des choses au moyen desquelles l'humanité parvient à donner satisfaction à ses besoins, et plus ces choses abondent, plus la richesse est grande."—II. PASSY, *Dict. de l'Econ. Polit.* VALEUR.

"L'économie politique est une science dont le but est de rendre l'aisance aussi générale qu'il est possible." . . . "Les richesses sont tous les biens matériels qui servent aux besoins des hommes. Un état est riche lorsque ces biens y sont très-répandus."—JOSEPH DROZ, *Econ. Polit.*, 1854. C. i. p. 1. and c. ii. p. 5.

† *Polit. Econ.*, vol. i 1848, Pref. p. 9.

How comes it, then, we may not unreasonably ask, that the science which treats of the production, exchange, and distribution of wealth (call it by what name you will), having objects so useful, so noble, so vital, so universal in interest, should be so often calumniated and denounced? Why are its disciples so frequently held up to derision, to contempt, to execration? "The most useless of studies," says Dr. Macnish,\* "is metaphysics; next to that, logic. I might, perhaps, except *political economy*, which is equally bootless, and capable of producing a thousand times more mischief." "No real Englishman, in his secret soul," says Mr. Walter Bagehot, in one of his lively essays, "was ever sorry for the death of a *political economist*; he is much more likely to be sorry for his life."† "As for the *political economists*," says Dr. Robert Southey,‡ "no words can express the thorough contempt which I feel for them. They discard all moral considerations from their philosophy, and in their practice they have no compassion for flesh and blood." "It would be," says the *Saturday Review*,§ "about as hopeful a task to argue a *Scotch political economist* into poetry or love. It is no use discussing the flavour of grapes with an Esquimaux, or disputing with a native of Timbuctoo on the properties of ice." The Rev. Charles Kingsley, with his usual vehemence, and much less than his usual justice, exclaims, in his lately published *Miscellanies* :—

"What sanitary reformers could have found in the doctrines of modern political economists which should lead them to believe that human life would be precious in their eyes, is unknown to the writer of these pages. Those whose bugbear has been over-population, whose motto has been a euphuistic version of 'the more the merrier, the fewer the better fare,' cannot be expected to lend their aid in increasing the population by saving the lives of two-thirds of the children who now die prematurely in our great cities, and so still further over-crowding this unhappy land with those helpless and expensive sources of national poverty—rational human beings in strength and health." And again: "By political economy alone has this faculty (of progress and invention) been denied to man. In it, alone he is not to conquer nature but simply to obey her. Let her starve him, make him a slave, a bankrupt, or what not, he must submit, as the savage does to the hail and lightning. '*Laissez faire*,' says the

\* *Book of Aphorisms*, p. 25.

† P. 22, 1858.

‡ *Life*, &c., Let. lv. vol. vi. p. 58.

§ 20th February 1858, p. 178.

'*science de la misère*,' as it has truly and bitterly been called, '*Laissez faire!*'"\*

Such are a few of the amenities to which I have referred that I may inquire their cause. This inquiry may do much to throw light on the real scope of the science, and on our relations to it both as members of the social body, and still more as instructors of the young.

To learn what a thing is not is often a great step towards learning what it is. Now, if I mistake not, there are widely prevalent, in different quarters, two fundamental misconceptions regarding the nature and aim of economic science—misconceptions not the less real or the less mischievous because they do not always, or often, assume the form of definite propositions, with which it would be comparatively easy to deal.

I. The first consists in supposing that it is a purely abstract science; that it ignores the individual man; that it looks wholly at general results, regarding all things only in the mass, wholly indifferent to individual suffering, careful only to know whether the average or balance be on the right side. Its subjects are Capital and Wages and Rent, and such so-called abstractions; not, as it seems, toiling and suffering and sorrowing men, who are but ciphers in the general account. But an illustration from one of our most popular writers will make this form of fallacious estimate more palpable than any statement of mine can succeed in doing. You are probably all familiar with Mrs. Stowe's work called "*Dred*." In that terrible scene, after Nina Gordon's death, between Jekyl, Mr. Gordon's lawyer, and Harry Gordon, the half-caste, who has just discovered that he is hopelessly the slave of his own father's wicked son, and his own half-brother, the following passage occurs:—

"If, by any kind of inward clairvoyance, or sudden clearing of his mental vision, Mr. Jekyl could have been made to appreciate the anguish which at that moment overwhelmed the soul of the man with whom he was dealing, we deem it quite possible that he might have been moved to a tran-

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\* *Miscellanies*, vol. i. p. 115. Closely similar is the raving of Proudhon: "*La misère est le fait de l'économie politique. L'économie politique a besoin que la mort lui vienne en aide. . . . C'est la théorie de l'instabilité et du vol.*"—*Contradictions Économiques*, t. ii. p. 214.

sient emotion of pity. *Even a thorough-paced political economist may sometimes be surprised in this way by the near view of a case of actual irremediable distress*; but he would soon have consoled himself by a species of mental algebra" (Mrs. S. probably means *arithmetic*, but *algebra* sounds better), "that the greatest good of the greatest number was nevertheless secure, therefore there was no occasion to be troubled about infinitesimal amounts of suffering.\* In this way people can reason away every kind of distress but their own; for it is very remarkable, that even so slight an ailment as a moderate toothache will put this kind of philosophy entirely to rout."†

This attack is the less excusable, because Mr. Jekyl does not, in the least degree, pretend to be a political economist. But he does pretend, and very boldly too, to be a Christian; and, on the very next page, he is made to say:—

"‘My boy, this is a dispensation of Divine Providence.’

"‘I call it a dispensation of human tyranny!’ said Harry.

"‘It pleased the Lord,’ continued Mr. Jekyl, ‘to foredoom the race of Ham.’

"‘Mr. Jekyl, that humbug don’t go down with me. I’m no more of the race of Ham than you are. I’m Colonel Gordon’s eldest son.’

"‘Well,’ said Mr. Jekyl, ‘my boy, you mustn’t get excited; everything must go, you know, by general rules; we must take that course which secures the greatest general amount of good on the whole, and all such rules will work hard in particular cases. *Slavery is a great missionary enterprise for civilizing and christianizing the degraded African.*’"‡

Now, it would be every whit as just and reasonable to call this wretched man a Christian as a political economist. He is as little the one as he is the other; while he professes to be, not the latter, but the former. Mrs. Stowe knew that Christianity was not to be confounded with the degraded man who professed it. Why has she confounded political economy with the degraded man who did not profess it, and who, certainly, being the creature of Mrs. Stowe’s brain, knew as little about it as Mrs. Stowe herself, his creator?

As Mrs. Stowe is but a type of a class who represent econo-

\* The following passage, by the same writer, is curious in connexion with the foregoing:—"Mr. Simeon Brown’s usual demeanour was that of the most leathery imperturbability. In calm theological reasoning he could demonstrate, in the driest tone, that if the eternal torment of six bodies and souls were absolutely the necessary means for preserving the eternal blessedness of thirty-six, benevolence would require us to rejoice in it, not in itself considered, but in view of greater good. And when he spoke, not a nerve quivered."—MRS. STOWE, *The Minister’s Wooing*, c. x. p. 68, 1859. Was Simeon Brown also a Political Economist?

† *Dred*, c. xxxvii. p. 349, 1856. S. Low’s Ed.

‡ *Ibid.*, p. 350.



mists as too much engrossed with the general to bestow a thought on the particular, let us examine the representation, and test its justice a little further. It is not denied that economists seek the general welfare; it is on this admission that the very charge is founded. Now, is not every case of individual misery, or suffering, or poverty, just so much to be deducted from the general sum of wellbeing? Even, on the barest arithmetical calculation, is not the fact so? And by what process can the man who aims at promoting the general wellbeing be indifferent to the exceptions—alas! too numerous—to the generality of that wellbeing. When a merchant balances his year's books, are we to be gravely told that, because the balance is on the right side, he is indifferent to the losses he has sustained and the bad debts he has made? Does he not clearly see, and as keenly feel, that every loss, every bad debt, has just gone so far to lessen his balance and to endanger its being turned the other way? What sane man ever thought of hardening himself against the sorrows of the houseless wanderer, by counting up the comfortable houses in the streets he traverses, and reckoning the number of comfortable persons that they may contain. If he ever thinks of these happy homes, the very force of contrast must intensify, not diminish, his compassion for those (exceptions though they may be) who know not where to lay their head. But I, perhaps, demand too much when I suggest that, after all, an economist is "a man and a brother," and not wholly dead to the good feeling common to humanity. I fall back, therefore, on my illustration, and contend, that just as the merchant laments his losses, so, in degree, must the economist lament the exceptions which mar the universality of the happiness he seeks for the world at large. I will not even ask why any man who is so callous to human suffering should trouble himself about human happiness at all. Assuredly, it cannot be for the sake of popular applause, such as attends most forms of so-called "philanthropic" enterprise. Alone, among the lovers of his fellows, the economist is denounced as a foe to the higher interests of man. He is even made accountable for the evils which, in the past, he has vainly striven to prevent, and which only obedience to his teaching

can avert for the future, or materially alleviate for the present.

Closely related to this fallacy, and indeed but a branch of the same stem, is the notion that it is the business of economic science to expound great and unrelenting laws, by the operation of which—quite irrespective of human will, intelligence, or ignorance—human affairs in the economic sphere are ruled; and that it is virtually as far removed from human interference, and, consequently, from direct human interest, as is astronomy, the science of the stars, whose course man may study, and even comprehend, but cannot quicken, retard, or change. Economists themselves may have given, against their wish, or at least without intention, some countenance to this delusion, by such phrases as, “Supply and demand resemble the ebb and flow of the tide,” and “Prices find their level as water finds its;” just as if human wishes, feelings, fancies, had as little concern in affecting demand and supply, the rise and fall of prices, as they have in regulating the flux and reflux of the sea. Such an elliptical form of speech as this: “Scarcity raises, and abundance lowers prices,” is apt to hide the fact, that it is not scarcity, but the *mental* conviction or apprehension, well or ill founded, of scarcity, that raises prices; that it is not abundance, but the well or ill founded belief in, or expectation of, abundance, that lowers prices;\* and so on throughout the whole range of economic phenomena, the operation of human, that is, of individual motive, will, character, and conduct, enlightened or unenlightened, well or ill directed, has been obscured;† and the dependence of general results on these has been too much forgotten, or, at least, practically neglected.

As an example, a recent writer in the *London News* remarks:—

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\* “The *Times*’ City Article of 5th March says:—‘The publication of the despatch of the French Foreign Minister on the affairs of Italy, &c., caused the English funds to open with much heaviness, at a further decline.’”—*Scotsman*, 7th March 1860. How wide a gap between the effect and its alleged cause!

† “David Hume, however, with his usual clearness, says of the ‘drain of specie,’—‘We need not have recourse to a physical attraction, in order to explain the necessity of this operation. There is a moral attraction, arising from the interests and passions of men, which is full as potent and infallible.’”—*Essays*, vol. i. pp. 283, 1788. *Balance of Trade*.

“Whether commercial revulsions be or be not as *necessary and inevitable* as are the flux and efflux of the tide, forms a curious and doubtful question. Certain it is that they make their appearance in the ordinary course of affairs, if not at periods exactly regular, at least in cycles of which it is not difficult to determine the average extent. Difficult though it be accurately to determine the principles which regulate them, they are usually found preceded by symptoms, and followed by results bearing an analogy, if not a resemblance, to each other. A close attention to these, on the part of our business men, would go far towards the dissemination of that sound information respecting the laws of trade, which would greatly mitigate the severity of commercial revulsions.”

You will observe, that the recurrence of commercial crises is here, throughout, classed with the occurrence of an eclipse, or the return of a comet, as if human agency were as little responsible for the former as for the latter. The subject is thus taken in great measure out of the field of human conduct, and men are set to the very subordinate task of studying signs of the approach of the evil, in order merely to mitigate its severity, instead of trying to prevent it by the exercise of intelligence, integrity, and forethought, to the neglect of which the evil itself is wholly and solely due.

The notion that Economic Science is occupied with abstract laws, with laws operating upon men from without, rather than through them and within, is perhaps, in part, due to the fact that in economic, as in physical and even political events, there seems ever a compensating, self-adjusting tendency, acting so deep below the surface, that a careless thinker is apt to suppose that in moral, no less than in physical affairs, it is nature's own doing, undisturbed by, or, at least, triumphing over human agency. Thus a flood or an earthquake devastates a province; and gradually nature's own finger effaces the signs of ravage; the ruins are greened over, and in time the old is forgotten amidst the beauty and fertility of the new. So, when a political revolution breaks out, as in France in 1848, for a time all is disorder; but gradually, somehow or other, a form of government of one or other kind is evolved from the confusion; the weltering mass of human atoms enters into new combinations; the new order of things is by degrees consolidated, and the stranger sees no traces of the havoc that has been wrought. So, in financial crises, in famine or pestilence, which lay waste a nation's resources, or

sweep away its population, just as graves in time grow green, does a surface of prosperity return; and men submit to one infliction as calmly as to the others, believing, or assuming, that all are equally inevitable; equally, and in the same sense, natural, as if human will and human agency had as little share in the production of one class of these phenomena as of the others. A fatal delusion in all cases where human foresight is competent to avert or modify an evil issue! It is true that "divine laws" do ever vindicate themselves; but not less where they are violated than where they are obeyed; and it were a strange perversity to argue thence that no alternative exists. In the physical world *prevention* may be often impossible, and *remedial* measures may be all within the power of man; but in the moral and economic spheres the power of *prevention* is greater than that of *cure*; and it is a dangerous error to believe that evils of this class are inevitable, or that they will, in the course of nature, remedy themselves.

Another form of this fallacy represents the economist as caring only about the multiplication of commodities, as if man existed for the sake of commodities, not commodities for the sake of man. How often of late years have we heard the "Manchester school," as it is called, taunted with placing the production of cotton goods above the welfare of human beings. Now, let us ask, for what purpose is cotton-spinning carried on? Is it not that men and women and children may be clothed and sheltered from cold and rain and heat? Unless cotton be wanted, it will not be bought or, of course, sold; if it be not sold, it will not long continue to be produced. Even Mr. Carlyle declares:—

"Cotton-spinning is the clothing of the naked in its result; the triumph of man over matter in its means. Sorrow and despair are not the essence of it; they are divisible from it. At this hour are they not crying fiercely to be divided? The great Goethe, looking at cotton Switzerland, declared it, I am told, to be, of all things that he had seen in this world, the most poetical. Whereat friend Kanzler von Müller, in search of the palpable picturesque, could not but stare wide-eyed. Nevertheless, our world-poet knew what he was saying." \*

Nor is this all; cotton-spinning not only clothes the naked

\* *Chartism*, c. 8.



purchaser, it feeds, too, the hungry producer, who, but for it, might starve. In the manufacturing districts of Lancashire alone, some 2,000,000 of human beings depend on cotton for their very life. A short grain-crop will not be more fatal to them than a short crop of cotton. If so, even a poet may perhaps deign to perceive that one may be interested in cotton-spinning from the most human and humane considerations, and without at all valuing cotton more than men.

Whether, then, economics and economists be represented as necessarily absorbed in the contemplation of general results, of general law, or of accumulated products, to the neglect of those by whom and for whom they are created, the charge is at root substantially the same, that of forgetting not only the end in the means, but the individual in the aggregate, the living, human unit in the great sum total. In all forms alike, I maintain it to be unjust, and a libel on economists, or at least on the science that they profess.

II. The second fundamental misconception to which I have referred is, strangely enough, the very reverse of the first. It consists in supposing that economic science aims at teaching individuals how most rapidly and surely they may enrich themselves, without regard to the interests or rights of others; and that, consequently, if it does not in words advocate, it in truth inculcates and develops *selfishness*, in the basest sense of that much abused word. Now, it is quite true that the aggregate is composed of individuals, and that without individual enrichment society could not be enriched; but it is not without a most important limitation that economic science urges or directs any individual to enrich himself. What that limitation is will appear clearly from a very simple test. What is absolutely, that is, apart from all other considerations, the speediest mode in which an individual can enrich himself? Do not be startled, if I answer, that I take it undoubtedly to be **THEFT**. It is a far more tedious process to earn by working, than to seize by stealing.\* It may be said that this is the

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\* Tacitus says of the ancient Germans: "*Nec arare terram aut expectare annum tam facile persuaseris quam vocare hostes et vulnera mereri; pigrum quin imo et incers videtur sudore acquirere quod possis sanguine parare.*" § 14. If for *sanguine* we read *furto* or *fraude*, the work is at once easier and less dangerous.

quickest, but not the surest or safest way. No doubt, theft is liable to the danger of detection and punishment. But this might be greatly diminished by increased prudence and dexterity. And apart from direct, actual stealing, there are other and less perilous modes of enriching one's individual self rapidly, such as gambling, adulteration of commodities, or fraudulent use of trade-marks, or of short measures or weights, or trading recklessly with others' money, which has been intrusted to one on account of sanctimonious and philanthropic pretensions, as did that Sir John —, who robbed Peter to pay himself, and who, but for "adverse fortune," might possibly have gone to his grave a rich man, and a reputed saint, without loss even to those whose money he had turned to his own account. To these, and all such practices, what has Economic Science to say? Does it inculcate, approve, connive at, or repudiate and condemn them? It condemns them all, and why? Simply because it is its province to teach men how to enrich themselves only in so far, and in such way, as the profit of the individual redounds to the profit of the community.\* The man who enriches himself, as by stealing or gambling, at others' expense, or even without advantage to the community, is outlawed from the economic pale as a rebel against its fundamental law. The agriculturist, the manufacturer, the merchant, and many more besides, confer services on the community, of which the remuneration to themselves is the index and the measure. But the thief and the gambler waste the resources of the community, and do not even merely transfer them from hand to hand.

Here, then, you have the key to the true nature of Economic Science. It does not, as the first objection alleged, concern itself with the enrichment of the community, to the neglect of the individuals of whom the community is made up. Neither does it, as the second objection alleges, aim at enriching the individual apart from the community to which he belongs. It

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\* "In reference to Lamartine's vague but mischievous talk in reply to an address by a society of political economists—'Ancient science tended only to render individuals wealthy, but our new science will apply itself to make the entire people rich,' Mr. Sargant well observes—'The very name might have taught Lamartine that the aim of the society was far different from the art of rendering individuals wealthy.'"—*Social Innovators and their Schemes*, c. vi. s. iii. p. 373. 1858.

seeks to unite the individual and the community; to enrich the community through individuals; to enrich individuals for the sake of the community as well as for their own. These two misconceptions, which are, in truth, mutually destructive, furnish the answer each to the other. Economics cannot at once exalt the community over the individual, and the individual over the community. It, in truth, does neither; and of the two contraries, which cannot, logically, both be true, both are false. By blending the individual and the general welfare, it at once directs, exalts, and restrains within the limits of justice individual desire of gain. It furnishes a test by which to try individual acquisitions; it gives, on one hand, to personal efforts a higher than personal aim; while, on the other, it removes the general wellbeing from the region of abstractions, by showing it to consist in the wellbeing of individuals. It thus individualizes the general, generalizes the individual; and by combining the two, it guarantees and ennobles both.

WEALTH, then, as we are now prepared to understand it, really deserves its etymology. Not because it is the only wellbeing, or even the highest, but because in a nation this kind of wellbeing is the indispensable preliminary and accompaniment of every other.

"Nature herself," it has been well said by Mr. James Mill, the illustrious father of a still more illustrious son, "forbids that you should make a wise, virtuous people out of a starving one. Men must be happy in themselves before they rejoice in the happiness of others; they must have a certain vigour of mind before they can, in the midst of habitual suffering, resist a presented pleasure; their own lives and means of wellbeing must be worth something before they can value, so as to respect, the life and wellbeing of any other person.\* This or that *individual* may be an extraordinary individual, and exhibit mental excellence in the midst of wretchedness; but a wretched and excellent people never yet has been seen on the face of the earth."

It happens, unfortunately, however, that this view is far

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\* "Le colon n'appréhende point de voir croître sa famille quand il prévoit pouvoir la soutenir; mais des gens découragés, ou dans la misère, pressent trop peu la vie pour avoir soin de celle des autres. On ne songe point à arroser des plantes quand on a besoin d'eau pour soi-même."—HERBERT, *Essai sur la Police Générale des Grains*, 1755.

from being as general, much less universal, as it is just. A supposed antagonism between economic and moral progress is a common theme now, as it has ever been. Thus Volncy\* says: "Ignorance *and the love of accumulation* are the sources of all the plagues that infest the life of man." Again, Coleridge† is thus reported by the late John Sterling: "Luther said truly, 'How different is a rich country from a happy country!' A rich country is always an unhappy, miserable, and degraded country." That Coleridge is no authority on this subject, at least, must be admitted when it is known that in his periodical called *The Friend*, he revived and adopted the fallacy, as old as the debates of the Long Parliament in 1644-45, that taxation could not be injurious by mere excess in amount, inasmuch as it is merely "exhaled in vapours and returned in drenching showers,"—a fallacy of which, as Mr. De Quincy shows, the French financier Necker had proved the absurdity twenty-two years before its re-appearance in *The Friend*. Whether he rightly quotes Luther I cannot tell. But I can understand that even Luther, bent, as his whole mind was, in a quite different direction, had not wholly shaken off the influence of his monastic training. None, perhaps, are so ready to denounce the abundance of the social table as those who live upon its broken meats. Chateaubriand, too, in a feeble echo of Rousscau, asserts: "Moral corruption marches abreast with the civilisation of nations,"—"a notion," says Bastiat, "as old as Heraclitus at least, but not the truer for its age." Again, Dunlop, in his *History of Roman Literature*,‡ has this remarkable passage:—

"The accumulation of wealth naturally tends to the corruption of a land. But a people who, like the Romans, *suddenly* acquire it by war, confiscations, and pillage, degenerate more quickly than the nations among whom it is collected by the *slower* processes of art, commerce, and industry."—(See also Alison's *History*, &c., vol. i. p. 29.)

You will observe that the only distinction here recognised between wealth acquired by robbery and wealth acquired by honest industry, is that of time. The former is a quicker, the latter is a slower process. But both are evil, and, for ought that is said to the contrary, both are, in all other respects,

\* *Ruins of Empires*, c. viii.

† *Life*, by Hare, p. xviii.

‡ Vol. iii. p. 240.



alike ! Even Lord Elgin, a man of affairs and experience, a statesman, diplomatist, legislator, is reported to have thus addressed, on Thursday last, the students of the University of Glasgow, on occasion of his being installed as rector :—

“And as a result” (of the Great Exhibition of 1851 in London, and the expectations of peace and brotherhood that it called forth), “in too many quarters, it is to be feared, faith in a *civilisation material rather than moral*, in the substitution of a *cunningly devised social mechanism* for the energy and self-reliance of the individual man, in a heaven to be reached through self-indulgence rather than self-sacrifice.”\*

To this passage I shall return. Meantime, I must express my deep regret that a man of so high position and of so great influence should have styled the natural, indestructible, divinely appointed constitution of society in the economic sphere, “a cunningly devised social mechanism.” His lordship has thus, no doubt, quite unwittingly, but not less really, joined hands with the whole race of socialistic innovators, who, however diverse their own systems, agree entirely in regarding the present order of society as “a cunningly devised social mechanism,” which, being the handiwork of men, and not the ordination of Providence, may advantageously be subverted and rased to its foundations, to make room for some other “social mechanism” still more “cunningly devised.”

In the face of such opinions as those that I have cited, and quotations might too easily be multiplied to a like effect, it cannot be an idle task briefly to inquire, “What is the relation between morality and economic wellbeing?” Is the relation one of mutual incompatibility? Do poverty and virtue, do riches and vice, always go together in a nation? Is the coincidence either way the result of chance? Or is the connexion one of reciprocal dependence and perfect harmony? What, then, are the moral qualities that not only tend to increase national wealth, but without which national wealth could not exist at all? If ignorance, and idleness, and intemperance, and improvidence, and wastefulness, and extravagance, and falsehood, and dishonesty, and quarrelsomeness, and licentiousness, prevailed more extensively than they now do, say in our own community, would it be richer or poorer

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\* *Scotsman*, 23d December 1859.

than it now is? Can anything be plainer than that such qualities not only are incapable of producing wealth, but tend to destroy it wherever it exists? Is it not obvious that it is just because, and exactly in the degree that, the opposites of these qualities now predominate, that intelligence, and industry, and sobriety, and forethought, and self-control, and truthfulness, and honesty, and peacefulness, and chastity, and love of order and punctuality, and respect for property, and last, not least, parental care, are even now more prevalent than the contrasted vices; that this country possesses what amount of economic wellbeing it now enjoys; and that, were these qualities made still more common, more general, and, finally, universal, our economic wellbeing as a nation would be proportionally increased. If a drunken workman does here and there prosper for a longer or shorter time, is it because of, or in spite of, his drunkenness? Is it his drunkenness, or what of sober interval is left to him, that enables him to earn the high wages that, in spite of drawbacks, peculiar skill commands? If he were more drunken, would he earn more or less? would his labour be more or less productive? But I would apologize to this meeting for questions so puerile, were it not that on this subject there is nothing so simple that it can be safely assumed to be even generally accepted, much less practically believed. If an individual here and there thrives, or seems to thrive, in a sense, and for a time, by dishonest means, he is a noxious parasite on the social tree, which it is the business of society to cut away. And what an individual brigand is to the community in which he dwells, that is a nation of brigands to the earth at large. In neither case is there any element of permanence; the laws of the universe are too powerful for both; their wealth turns to ashes not because, as Mr. Dunlop thinks, it has been *suddenly*, but because it has been *wrongfully*, acquired; because the one has arrayed against him the outraged interests and moral sense of the community; the other, of collective humanity. Both have within themselves the seeds of sure and not slow decay.\*

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\* "The Romans, whose ruling passion was depredation and conquest, perished by the recoil of an engine which they themselves had erected against mankind."—DR. ADAM FERGUSON, *Essay on the History of Civil Society*, pt. v. s. 4.

We can now, perhaps, appreciate more justly than before the old and hackneyed contrasts between moral progress and progress (so-called) material. Such an institution as the Crystal Palace of 1851 was a type, and an evidence, certainly of material, but not less really of moral, progress. It is true that adulteration of goods and fraudulent banking, and false measures of length or weight, and other still too common practices of like nature, are not symptoms of moral progress. But not more are they symptoms of material progress. They are mischievous obstructions to the latter as well as to the former. The world is, *materially*, so much the poorer for them, as well as, *morally*, so much the worse. Thus, it is no vain or fanciful saying of the idealistic Emerson :—

“Money, which represents the prose of life, and which is hardly spoken of in parlours without an apology, is in its effects and laws as beautiful as roses. *Property keeps the accounts of the world, and is always moral.* The property will be found where the labour, the wisdom, and the virtue have been in nations, in classes, and (the whole lifetime considered, with the compensations) in the individual also.”\*

But to assert that moral qualities are indispensable to national wealth or economic wellbeing, and that the latter is indeed a measure, as well as an evidence, of the former, is to state only one-half, one side of the truth. It is scarcely less true, that at least a certain amount of economic wellbeing is needful to give even moral qualities free play. Misery is a soil not propitious to the growth of moral excellence. Great riches have their temptations and dangers, it is not denied; but great riches are necessarily exceptional and rare. Not so, alas! misery and destitution; and vice is not more surely productive of misery than is misery of vice. That comfort is a moralizing influence, and discomfort the reverse, cannot, I think, be questioned by any one who will observe with ordinary attention the occurrences of daily life. It is well said by

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Dr. Samuel Johnson says—“I know not why any one but a schoolboy in his declamation should whine over the Commonwealth of Rome, which grew great only by the misery of the rest of mankind.” “A people, who, when they were poor, robbed mankind; and as soon as they became rich, robbed one another.” Yet the same Dr. Johnson says, in the same breath—“*The Romans, like others, as soon as they grew rich, grew corrupt*”; and in their corruption sold the lives and freedoms of themselves, and of one another.” Is a robber not corrupt until he has grown rich?—See *Boswell's Johnson*, vol. ii. p. 66. Ed 1835. C. li. See *Appendix*, No. IV.

\* *Essays*, 2d series, “Nominalist and Realist.”

one whose name is even less known than his writings, M. Osmond de Beauvoir Priaulx :—

“The more numerous the comforts, viewed as necessities by the great body of the people, and the further those comforts are removed from gross sensuality, the higher the moral condition of the people—is a principle in politics without an exception. The warm house, the neat furniture, the comfortable meal, the decent clothing, the well-wedged and flower-decorated garden, the favourite singing-bird and spaniel, and the small but well-chosen collection of books, are beyond the means of the idle, and not the choice of the tavern-hunter.”\*

With how caustic satire does the Rev. Sidney Smith treat the opposite doctrine !

“The moral story,” he says, “for the poor generally is, that a labourer with six children has nothing to live upon but mouldy bread and dirty water ; yet nothing can exceed his cheerfulness and content—no murmurs, no discontent ; of mutton he has scarcely heard, of bacon he never dreams ; farinaceous bread and the water of the pool constitute his food, establish his felicity, and excite his warmest gratitude ; the squire or parson of the parish always happens to be walking by, and overhears him praying for the king, and the members of the county, and for all in authority ; and it generally ends with their offering him a shilling, which this excellent man declares he does not want, and will not accept. These are the tracts which Goodies and Noodles are dispersing with unwearied diligence. It would be a great blessing if some genius would arise who had a talent of writing for the poor.”

That such should be the close interdependence of social morality and social prosperity will be the more readily accepted if, for a moment, we endeavour to imagine the facts to be reversed. If every step that a nation advanced in prosperity were also, of necessity, a step in immorality ; if, on the other hand, all moral progress were equivalent to a diminution of physical comfort ; if rags and misery were the sure accompaniment of virtue ; if, in short, every material gain were a moral loss ; if every material loss were a moral gain ; if every moral gain were a material loss, and every moral loss a material gain ; if vice were the natural path towards wealth, and wealth towards vice ; virtue towards misery, and misery towards virtue ;—what an appalling anomaly and contradiction would the life of man present ! But the mind refuses to contemplate, it is scarcely able to conceive, a world so inverted.

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\* *Outline of a System of National Education*, Lond. 1834 C. 3. p. 40.



It shrinks from the audacity even of supposing what really to believe would be blasphemy and despair.

If these things are so, how thoughtless, and foolish, and mischievous must appear to us the expressions of disparagement and contempt which we so often hear regarding wealth, or money, which is so generally and naturally taken as the type of wealth—expressions which, coming, as they often do, from those who have it in abundance, or, at least, sufficiency, sound strangely in the ears of those who have it not, and whose sad hourly experience contradicts the tenor of the denunciation. “Moralists,” says Sidney Smith, with his usual horror of cant, “tell you of the evils of wealth and station, and the happiness of poverty. I have been very poor the greatest part of my life. I have borne it, I believe, as well as most people; but I can safely say that I have been happier every guinea I have gained.”\* In a similar spirit, but with a more unctuous relish, writes the gentle and genial Charles Lamb: “Goodly legs and shoulders of mutton, exhilarating cordials, books, pictures, the opportunities of seeing foreign countries, independence, a man’s own time to himself, are not *muck*, however we may be pleased to scandalize with that appellation the faithful metal that provides them for us.” “Mark this!” says Sir Edward Bulwer Lytton, “never treat money affairs with levity—*Money is character!*”† And, again, “Beware of debt, and never call that economy meanness which is but the safeguard from mean degradation.”‡ “Nothing,” says Mr. Henry Taylor, in his admirable *Notes from Life*, “breaks down a man’s truthfulness more surely than pecuniary embarrassment:

“ ‘An unthrift was a liar from all time,  
Never was debtor that was not deceiver.’ ”§

These passages, and especially the phrase which I have cited with peculiar pleasure from Sir Edward Bulwer Lytton, “**MONEY IS CHARACTER**,” are full of wholesome warning to the many, especially of the young, who think it a proof of spirit, of noble disinterestedness, of a poetical temperament,

\* *Memoir*, &c., vol. i. p. 223, c. 9.

† *What will He do with It?* vol. iii. p. 57, b. 7, c. 7. 1859.

‡ *Ibid.*, vol. ii. p. 51.

§ *Of Money*, p. 19. 1854.

of superiority to "grovelling cares," to sneer at economy, at money. Foolish conduct follows in the steps of foolish speech; and the first step to degrading dependence upon others, if not to actual dishonesty, is the neglect of that without which neither present nor future obligations can be met. I have watched more than one such downward career,—from heroic contempt of money to the bitter sense of the need of it; from that to debt; from debt to recklessness of engagements and loss of character and self-respect; from that to utter ruin and disgrace.

I have heard of a poet, who, in one of his works, exhorts "the philosopher" to trim his midnight lamp while Mammon, on his luxurious couch, dreams of his sordid gains. Well, this high-minded person, disgusted with the money-making and selfishness of the old world, emigrated to the new, and, in a fit of poetic abstraction, forgot to take his wife with him; and ever since, now for several years, his affection has been, in Douglas Jerrold's phrase, "*unremitting*," for he has *re-mitted* nothing to relieve his wife from the cares of mammon, to which, alas! she is not so insensible as her more highly gifted husband. The two parts of Sallust's description of Catiline hang naturally together, "He was lavish of his own money, greedy of that of others,"—a phrase which, brief as it is, Tacitus still further condenses thus: "He was profuse of others' money;" and Mr. Thackeray happily, if unconsciously, modernizes: "He was a free-handed fellow when he had any body's money in his pocket."\* In serious earnest, it is the means of others, in the long run, that those must squander who neglect the duty of acquiring and saving for themselves.

In fine, then, we may, in our dealing with the young, apply to wealth what Sidney Smith so wisely says of beauty:—

"Never teach false morality. How exquisitely absurd to tell girls that beauty is of no value, dress of no use. Beauty is of value, and if a girl has five grains of common sense she will find this out. The great thing is to teach her its just value. But never sacrifice truth."†

What, then, is the conclusion at which we seem to have

\* "Love the Widower," *Cornhill Magazine*, No. I. p. 47., 1860.

† *Life &c.*, vol. i. p. 335.

arrived? It is, that social morality and social prosperity bear towards each other no accidental relation; and further, that the ratio between them is not *inverse*, as some have said, and say, but *direct*. The two things are united together in a reciprocal dependence,—moral qualities, as before enumerated, being indispensable to wellbeing; and wellbeing, in its turn, indispensable for the development of those qualities. Now, this intimate interdependence, while it vindicates the economist from the charge of taking a low and narrow and mean view of human interests, presents a practical difficulty, or, at least, a serious question, which we must not overlook. How are we to set about endeavouring to produce a better economic state, thus shown to be dependent on moral qualities, which, again, are dependent upon it? The problem somewhat resembles this: In order to get iron, one must dig for it in the earth; but in order to dig, one must already have iron implements wherewith to dig. Even this seeming puzzle, however, man has contrived to solve. He digs for iron, and with iron. The difficulty was obviously greatest, I may say existed solely, at the outset; at every step the progress would become more rapid and more sure. How is it with the seeming *impasse* that we are now considering? Social prosperity or adversity, in brief, economic condition, is not accidental, but the result (according, as I believe, to laws of Divine appointment) of human acts, of human conduct, wise or foolish, just or unjust. Human conduct, again, is the result of motives, impulses, beliefs, guided or unguided by intelligence and knowledge, agreeing or disagreeing with each other, and with the truth of things; in short, of *character*, in the widest sense of that term, for which I can find no substitute at once better and as short. By *character* I mean not reputation, not even merely moral character, but the sum, or rather the resultant, of a man's tendencies, convictions, impulses, principles, habits, the force and form of his whole being, physical and mental; all that constitutes him truly an individual. *Conduct*, then, is at once the cause of *condition* and the effect of *character*, though it is also true that condition does react upon character, and through that upon conduct. Conduct is thus the bridge by which character passes over into condition; the means by

which the *inward* character, that is, the whole mental and moral state of a community is translated into its *outward* even economic state.\* “A path here opens for us among the mountains;” one thing, at least, becomes clear, we can influence condition mainly through conduct,—solely, if we include others’ conduct as well as our own; we can influence conduct only through character. Thus are we now thrown back at once, and finally, on teaching and training. It is to the formation and training of character that we must look; it is on the mind *within* that we must operate; only through that can we reasonably hope to improve the state of things *without*. The progress so begun may be slow, but its speed must increase as it goes on, for the mutual dependence and reaction, which were the great obstacle at the outset, become ever a stronger auxiliary as we proceed. If, then, it is on and through the mind that we must operate, we must do so at that time of life when the operation is at once easiest and most effective, in order that error and evil may be, as far as possible, prevented, not their consequences bunglingly repaired; in order that not only evil may be prevented, but that good may be insured by the early inculcation of sound principles, and the early formation of habits therewith according. The habits must rest on the foundation of principles; and these, to deserve the name, and to have any influence on act, must be thoroughly comprehended, digested, and assimilated, made into the likeness, fashioned into the very substance of the mind they are to guide. It is neither within my province, nor within my limits, to sketch a complete course of such teaching and training; but, whatever else we do, we must not neglect the specialties, if I so may call them, of the subject we are now considering. Many subjects, useful in various ways, are of very indirect and slight utility in the economic sphere; and just as we teach

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\* My meaning may be thrown into the form of a diagram, thus:—

“Nous aspirons à répandre l’aisance dans la classe ouvrière. Pénétrons-nous de cette vérité, que, pour améliorer le sort des hommes, il faut opérer une amélioration en eux-mêmes.”—Jos. Droz, *Econ. Polit.* p. 231. 1854.





the young sailor the principles of navigation, and the young farmer the principles of farming, so must we teach not only to the young sailor and the young farmer, but to the young aspirants to every calling whatsoever, those economic principles which are common to all careers in life, and which underlie, and pervade, and dominate the infinitely numerous, and infinitely diverse transactions which occupy six-sevenths of the time, and most even of the thoughts of nineteen-twentieths of the community, and which, in the aggregate, go far to make up the sum of what we call civilisation. It is the less necessary for me to go into detail on this subject, because you have had, and still have, other opportunities of learning what are the principles to which I have referred. This exposition in detail involves the study of the various relations of men to men as producers and consumers, buyers and sellers, receivers and payers of wages, capitalists and labourers, borrowers and lenders, and much besides ; so that, on entering upon busy life, the youth shall not be left to scramble through error and disaster for the costly and tardy wisdom of experience, but shall understand, and be able and ready to adapt himself to, the system of things in which he is to take his place, and through which he is to work his way to personal independence and social usefulness.\* Of the practicability of such teaching many of you are quite convinced, and all of you have, within easy reach, the best of evidence—that of facts.

There remains one other view of this subject, which I am anxious not wholly to neglect. When we look abroad on the social world in which we live, we need no peculiar acuteness to observe that a very large number of our fellows are not sufficiently provided with the refinements, or even the comforts, or even the necessities of life ; while others seem to have a superabundance of all those things, even beyond the power to enjoy. . Now, whatever our opinions, or cast of thought, we must all be anxious to improve the condition of the former class. Difference of opinion becomes possible only

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\* “ If the *business* does not rest on scientific truth, it can be good for nothing ; if the *science* does not lead to practice, it cannot deserve its name.”—Rev. F. D. MAURICE, *Learning and Working*, 1855, pref., p. 21.

when we begin to inquire how we can attain the end which we all desire to reach. A little reflection will make it obvious that only two courses are possible. Either those who suffer from an insufficiency of wealth, must be instructed, and enabled and induced to produce it for themselves, and to spend it prudently with an eye to future contingencies; or there must be, in some way or other, a transference of wealth from the hands of those who possess it to the hands of those who possess it not, or insufficiently. Let us take the second plan first. This transference may be made either *voluntarily* or *under compulsion*, legal or illegal. The *illegal* compulsion, which means robbery and spoliation, may be at once dismissed from our consideration, security of property being one of the fundamental conditions of the production of any wealth whatever. Of *legal* compulsion we have a specimen in Poor-laws; but these, waiving all other objections, obviously fail to meet the case, because they are, and must be, restricted to providing solely the barest necessities of life, so that the destitute shall not perish; and even were it possible to do much more than this, it will scarcely be argued that any portion of the community ought, at the expense of others, many of whom are themselves not much removed above poverty, to be maintained in those comforts and luxuries which it is yet, in itself, desirable that every human being should be able to enjoy. Voluntary transference, that is, by gifts or alms, is liable to precisely the same objection; among others, that it must, of necessity, confine itself to relieving those urgent wants, without the appeasing of which life cannot be maintained. Besides, it will not now be questioned that, whatever be the merit of alms-giving, the position of the alms-receiver is one of humiliation, and most unfavourable to the development of good, not to say high character. Formerly, when alms-giving held a higher place among the virtues, alms-receiving also was ennobled into a profession of peculiar sanctity, with what results we know too well. Further, all such transferees, voluntary or involuntary, while they tend to break down the self-respect and independence of the recipient, and impair, rather than aid, his power and disposition to produce, are encroachments on the fund of accumulated wealth which pays

the wages of honest industry; and the extent of which, in proportion to the number of claimants, determines the average amount of wages to be paid to each.\* Whatever may be said or thought of individual *capitalists*, it cannot be denied that it is for the interest of labour that *capital* should abound. Leaving, then, those modes to deal with exceptional cases of distress, and to alleviate existing evils, we are inevitably once more thrown upon the first mode as the only systematic and complete remedy for the vast evils we deplore, the only efficient preventive of their perpetuation.

Yet, simple and undeniable as this seems to me, and, I trust, to you also, it cannot be said that this view accords with the *practical* conviction of the majority of our countrymen and countrywomen. If we were to analyse the confused notions which lie at the bottom of many minds, we should find that they divide mankind into two classes, "the haves" and "the have-nots," with, of course, many gradations between them; that they regard it as the main duty of the former to give to the latter, and believe that it is from the selfishness of the former that all social evil arises; and that, were *giving* only rendered more abundant, all misery would cease,† there would be neither rich nor poor, but both extremes would meet on some common, if not half-way level. Regarding the justness of this representation, I appeal to those who hear me—men or women—Is there not in many of us a lurking conviction, which we find it difficult to shake off, that, somehow or other, if we were to give up our fine clothes, and ample food, and comfortably furnished houses, the misery around us would

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\* "Toute charité qui, au lieu d'être un simple secours temporel éventuel, se présente avec un caractère de régularité et de certitude, porte en elle un principe fâcheux et comme un encouragement offert à l'irréflexion et à la paresse. Tout ce qui tend à multiplier les pauvres et les assistés, au prix de grands sacrifices prélevés sur la totalité des capitaux, constitue une atteinte au bien être de la masse. Tout ce qui est ôté à la prévoyance et ajouté à l'assistance publique est enlevé aux salaires."—M. H. BAUDRILLART, *Etudes de Philos. et d'Econ. Polit.*, vol. ii., p. 263, 1858.

† In a truly beautiful and touching article in the *Cornhill Magazine* for May 1860, entitled "Little Scholars," this passage occurs—"We may be sure that such little sufferers—thanks to these good Samaritans—will be tenderly picked up and cared for. But I wonder, must there always be children in the world hungry and deserted? And will there never, *out of all the abundance of the earth*, be enough to spare to content those who want so little to make them happy?" (P. 552.) It does not occur to the writer to inquire the *causes* of this destitution; it is solely the contrasted "*abundance of the earth*" that engages attention.

be abated, if not destroyed? Do we never feel, as we pass a shivering fellow-creature in the street, a sensation almost of shame that *we* should be warmly clad, and fare sumptuously every day, while others pine in want and cold and hunger? A feeling surely natural, commendable, and infinitely nobler than the stony indifference which sweeps past the pauper without one thought of our common humanity, and its marvellous diversity of conditions! A feeling not only noble, but most beneficial, if it prompt us to wise efforts for the relief of misery, still better for its cure; but not beneficial if it deceive us into the fancy that by any possible, or even conceivable amount of *giving*, misery can be abolished. Give we must, for we have human hearts; and were misery only less common, how earnest and swift would be the relief extended! Were there but one ragged, starving child in this city, for example, what man or woman would pass it by? How many paces could it take along any of your thoroughfares before it would be caught up and warmed and fed and clothed? But just because such children count by hundreds, shall I say thousands, we pass them by almost unnoticed. We feel our impotence to redress all this enormous mass of evil. We cast off on each other the burden. We cry out against the heartlessness of the world, while A has no more right to fix the charge of want of charity on B, than B has to retort it upon A. We shrink from the inevitable conviction that no amount of alms will suffice; that the very relief tends directly and strongly to swell the evil, by stimulating improvidence, and crushing independence. It is by suppressing idleness, intemperance, improvidence, wastefulness, and uselessness, not by relieving the idle, the intemperate, the improvident, the wasteful, and the useless, that the evil is to be cured; by the drying up of its sources, and the cutting off of its supplies. One mode is like the baling of the water in scoops out of the sinking boat; the other is like the stopping of the leak. Bale out the water by all means; but, at your peril, leave the leak unstopped! The water will enter far more swiftly than it can be thrown out, and scarcely can delay, much less safety, be so obtained.

But I think I hear an indignant exclamation: "Hard-hearted, or rather heartless, race as you economists are, who



denounce every poor and suffering man as idle and improvident, or worse!" But, in truth, economists do no such thing, and still they say that four-fifths and more of poverty and its attendant evils are the result of idleness, improvidence, and wastefulness, somewhere or other. Deduct from the mass of wretchedness the evils which these cause, directly or indirectly, and the few cases of accidental or inevitable suffering which will ever arise from time to time will be swiftly dealt with by that beneficence which never holds its hand unless it be paralyzed by the crushing magnitude of the evil that defies its strength. Nor in this is there any real contradiction. Bound together, as we are, in the social chain, by the very necessity of things evil consequences are not confined to the original perpetrator of the evil, but spread far and wide, forwards, and to the right and left. Children suffer for their parents' vices; the cowering child that begs in the street pays the penalty of its father's drunkenness. The wife suffers for the husband's cause, the husband for the wife's. The incompetent workmen, who scramble for a wretched sustenance, and waste their miserable earnings, drag down the rate of wages all around them. The idle and the wasteful are a burden on the industrious and the frugal. Ship off distressed needle-women by hundreds to the colonies, and so far as these individuals are concerned, a blessed deed is done. But, allowing a little time, is the home supply one jot abated? "Not by the estimation of a single hair." Until these things are better and more generally understood, society's best hands will be kept continually working at the pumps, in spite of the ever renewed warning that the leak is gaining. The sums raised for charitable purposes by compulsory and by voluntary taxation are absolutely enormous, but the evil is not stayed. Poor-rates eat away the small gains of humble industry, and the rate-payer becomes himself a pauper. Alms-giving and poor-rates, which should be regarded as exceptional means for the treatment of exceptional evils, are almost universally regarded as permanent features of our normal state, nay, even as a ground of pride. Much of the fund on which productive industry relies for its promotion is, in various ways, swallowed up in the maintenance of unproductive idleness. And while this is true at the best of times,—when commercial crises arise

(and their cause also is not far to seek) the evil is aggravated many fold. Diminished receipts go along with increased burdens, and the social candle is burned at both ends. What amount of experience will open the general eye to the truth, that only at its source can the evil be arrested? So long as economic conditions are violated misery must result; and these conditions will continue to be violated so long as the young are not taught their nature and obligation, and trained to the habits which shall render their observance probable, if not certain, on the part of all.

The events of every day show more strongly the necessity of revising and correcting the popular estimate of wealth, and of teaching all how individual earnings, honestly acquired, frugally spent, wisely employed, and providently accumulated, tend to swell the sum of national wealth and to lay deep and broad the foundations of a nation's higher wellbeing. It is the great business of economic science to teach that only thus can national wellbeing, in any sense, high or low, be attained; and while, on the one hand, it reconciles individual with national interest, on the other, to reconcile the interest of the nation with that of the world at large. The wide diffusion of such teaching I, for one, believe, is destined to do much in the future to produce, in practice, that twofold harmony which, in theory, it demonstrates.

And now, in conclusion, having spoken successively of health and of wealth, I wish that time permitted me to point out some of the most striking analogies between their respective conditions, and to illustrate their mutual dependence. Health, for example, relying on outward as well as on inward conditions, the want of the former, which it is the business of economic science to consider, rendering the latter too often of none effect, and the neglect of the latter too often thwarting the attempt to realize the former. Suffice it now, however, to say, that the connexion is no new discovery. Solomon has said of Wisdom: "Length of days is in her right hand; in her left riches and honour." "Length of days," the synonym of HEALTH, which renders long life possible and to be desired; "riches and honour," the *honourable* WEALTH which, without the exercise of truly moral qualities, is beyond the reach of either individual or nation.

## APPENDIX.

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### No. I. p. 12.

Dr. A. Combe quotes the following results from Chossat's *Recherches Expérimentales sur l'Inanition*. Paris, 1843, p. 92:—

“Chossat found that, on an average, a warm-blooded animal loses about two-fifths of its weight before it dies of hunger; and he calculated that, while the fat loses 0·933 of its total amount, the blood lost 0·750, the muscular system 0·423, the organs of respiration 0·222, the bones 0·167, and the brain and spinal cord only 0·019, of their original substance.” He adds, “The comparatively small loss which the nervous system suffers is very remarkable. Had the brain been as liable to absorption as the other tissues of the body, one day's abstinence would have been followed by fatuity.”—*Physiology of Digestion*, ninth edition, 1859, p. 86., c. x. See also *Life of Dr. Combe*, last chapter.

Dr. W. B. Carpenter says,—“It is remarkable that the nervous centres should be (so far as is yet known) entirely destitute of them” (*Lymphatics or Absorbent Vessels*) *Human Physiology*, fifth edition, p. 111. But at present too much stress may easily be laid upon this fact, which is but one of the many difficulties—peculiarities—of the absorbent system.

### No. II. p. 23.

THE following is the List of Names appended to the Declaration quoted in the text:—

- Thomas Addison, M.D., Senior Physician, and Lecturer on the Practice of Physic, Guy's Hospital, &c.  
James Alderson, M.D., F.R.S., Fellow, Curator, and Lumleian Lecturer to the Royal College of Physicians.  
J. Moneriff Arnott, F.R.S., Member of the Council and of the Court of Examiners of the Royal College of Surgeons, &c.  
Neil Arnott, M.D., F.R.S., Physician Extraordinary to the Queen, Member of the Senate of the University of London.  
Benjamin Guy Babington, M.D., F.R.S., Physician to Guy's Hospital, &c.  
T. Graham Balfour, M.D., Surgeon, Royal Military Asylum.  
William Baly, M.D., Lecturer on Forensic Medicine at St. Bartholomew's Hospital, &c.  
Archibald Billing, M.D., F.R.S., Member of the Senate and Examiner in Medicine, University of London, &c.  
Golding Bird, M.D., F.R.S., Professor of Materia Medica and Assistant Physician to Guy's Hospital, &c.  
Francis Boott, M.D., Member of the Council of University College.  
W. Bowman, F.R.S., Professor of Anatomy and Physiology at King's College, &c.

- Richard Bright, M.D., F.R.S., Physician Extraordinary to the Queen, Consulting Physician to Guy's Hospital, &c.
- Sir Benjamin C. Brodie, Bart., D.C.L., F.R.S., Sergeant Surgeon to the Queen, Surgeon to H.R.H. Prince Albert, &c.
- George Budd, M.D., F.R.S., Professor of Medicine at King's College, and Physician to King's College Hospital.
- Sir William Burnett, M.D., K.C.B. and K.C.H., F.R.S., Director-General of Naval Hospitals and Fleets.
- George Burrows, M.D., F.R.S., Physician to St. Bartholomew's Hospital, &c.
- Wm. B. Carpenter, M.D., F.R.S., Examiner in Physiology, &c., University of London, Professor of Forensic Medicine at University College.
- Sir James Clarke, Bart., M.A., M.D., F.R.S., Physician in Ordinary to the Queen and to H.R.H. Prince Albert, &c.
- James Copland, M.D., F.R.S., President of the Royal Medical and Chirurgical Society.
- John Davy, M.D., F.R.S., Inspector-General of Army Hospitals.
- John E. Erichsen, F.R.C.S., Professor of Surgery, University College, and Surgeon to University College Hospital.
- William Farr, M.D., of Registrar-General's Office.
- Robert Ferguson, M.D., Physician Accoucheur to the Queen, &c.
- William Fergusson, F.R.S., Professor of Surgery at King's College, Surgeon in Ordinary to H.R.H. Prince Albert, &c.
- John Forbes, M.D., D.C.L., F.R.S., Physician in Ordinary to H.M. Household, Physician Extraordinary to H.R.H. Prince Albert, &c.
- R. D. Grainger, F.R.S., Lecturer on Physiology at St. Thomas' Hospital.
- William Augustus Guy, M.B., Physician to King's College Hospital, Professor of Forensic Medicine at King's College.
- Cæsar H. Hawkins, President of Royal College of Surgeons, Surgeon to St. George's Hospital, &c.
- Francis Hawkins, M.D., Registrar of Royal College of Physicians, and Physician to Middlesex Hospital.
- Thomas Hodgkin, M.D., Member of the Senate of the University of London.
- Joseph Hodgson, F.R.S., Member of Council of Royal College of Surgeons, Examiner in Surgery in University of London.
- Sir Henry Holland, Bart., M.D., F.R.S., Physician in Ordinary to the Queen and H.R.H. Prince Albert.
- William Jenner, M.D., Professor of Pathological Anatomy at University College.
- H. Bence Jones, M.A., M.D., F.R.S., Physician to St. George's Hospital.
- Francis Kiernan, F.R.S. Member of Senate and Examiner in Anatomy and Physiology, University of London.
- P. M. Latham, M.D., Physician Extraordinary to the Queen.
- William Lawrence, F.R.S., Surgeon Extraordinary to the Queen, and Examiner Royal College of Surgeons.
- Charles Locock, M.D., First Physician Accoucheur to the Queen, &c.
- Thomas Mayo, F.R.S., Physician to the St. Marylebone Infirmary.
- Richard Owen, F.R.S., Hunterian Professor of Physiology to the Royal College of Surgeons, &c.
- James Paget, F.R.S., Assistant Surgeon and Lecturer on Physiology at St. Bartholomew's Hospital, &c.
- John Ayrton Paris, M.D., F.R.S., President of the Royal College of Physicians.
- E. A. Parkes, M.D., Professor of Clinical Medicine University College, Physician to University College Hospital, &c.
- Rd. Partridge, Professor of Anatomy and Physiology, King's College, Surgeon to King's College Hospital, &c.
- Richard Quain, F.R.S., Surgeon to University College Hospital.
- G. Owen Rees, M.D., F.R.S., Assistant Physician and Lecturer on Materia Medica at Guy's Hospital.
- Edward Rigby, M.D., Examiner in Midwifery to the University of London.
- P. M. Roget, M.D., F.R.S., Member of Senate of University of London, Author of "Bridge-water Treatise on Physiology," &c.
- H. S. Roots, M.D., Consulting Physician to St. Thomas' Hospital.
- John Scott, M.D., Examining Physician to East India Company.



- Edward James Seymour, M.A., M.D., F.R.S., formerly Physician to St. George's Hospital.  
 Wm. Sharpey, M.D., F.R.S., Professor of Physiology University College. Examiner in Physiology University of London.  
 Alexander Shaw, Surgeon, and Lecturer on Surgery, to Middlesex Hospital.  
 Andrew Smith, M.D., Director-General, Army Medical Department.  
 T. Southwood Smith, M.D., Physician to London Fever Hospital, and Member of General Board of Health.  
 H. H. Southey, M.D., D.C.L., F.R.S., Gresham Professor of Medicine.  
 Edward Stanley, F.R.S., Surgeon to St. Bartholomew's Hospital.  
 R. Bentley Todd, M.D., F.R.S., Professor of Physiology at King's College, Physician to King's College Hospital.  
 Benjamin Travers, F.R.S., Surgeon Extraordinary to the Queen, and Surgeon in Ordinary to H.R.H. Prince Albert.  
 Alex. Tweedie, M.D., F.R.S., Physician to London Fever Hospital, Examiner in Medicine to University of London, &c.  
 W. H. Walshe, M.D., Professor of Medicine at University College and Physician to University College Hospital.  
 Thomas Watson, M.D., Consulting Physician to King's College Hospital.  
 Charles West, M.D., Physician Accoucheur, and Lecturer on Midwifery at St. Bartholomew's Hospital.  
 C. J. B. Williams, M.D., F.R.S., late Professor of Medicine at University College, and Physician at University College Hospital.  
 James Arthur Wilson, M.D., Senior Physician to St. George's Hospital.  
 LONDON, *March* 1853.

To this long list of authorities may be added the emphatic opinion of Sir James Clarke:—

“In my opinion, NO TEACHERS OF ANY CLASS SHOULD BE CONSIDERED COMPETENT FOR THEIR DUTIES TILL THEY HAVE GIVEN PROOF OF POSSESSING A GENERAL KNOWLEDGE OF THE STRUCTURE AND FUNCTIONS OF THE HUMAN BODY, AND OF THE LAWS OF HEALTH.”—SIR JAMES CLARKE, M.D., *Introduction to Dr. Andrew Combe's Management of Infancy*, 9th ed., 1860, p. ix.

### No. III.

I am often asked what books may best be used for the teaching of this subject. While I am wholly opposed to all attempts to teach this (and almost every other) subject by means of text-books in the hands of pupils, especially if read aloud in school, I think it well to subjoin the following list of works for the teacher's own use, that out of his own fulness he may speak. Unless he know much more than he needs to teach, his teaching will be of little worth.

1. Elementary Anatomy and Physiology for Schools and Private Instruction. By Wm. Lovett. Illustrated with ten coloured plates. London: Darton, 1851. (A second edition has since been published. To Mr. Lovett belongs the high honour of having been the first, in a time of general apathy, to qualify himself to impart this kind of instruction, and to prepare a text-book for the use of other teachers. His book may still be used with advantage from its brevity and simplicity, especially in the anatomical portion.)
2. Two Diagrams, illustrative of Human Anatomy and Physiology (four plates in each sheet), being Nos. V. and VI. of Johnstons

Illustrations of Natural Philosophy, with Explanatory Handbook, by William Turner, M.R.C.S., Edinburgh. (These plates were selected and arranged under the superintendence of Professor Goodsir; and the explanation is very lucid and precise. Published by Messrs. Johnston, 4, St. Andrew Square, Edinburgh.)

3. Nine large Diagrams, published by Messrs. Day, of London, in connexion with the Department of Science and Art. Mr. John Marshall, F.R.C.S., who prepared these beautiful diagrams, has lately published, in 4to, a Description of the Human Body, its Structure and Functions. As this volume is accompanied by an atlas in folio, with the nine diagrams reduced, it may be studied with great advantage even where the full-sized diagrams are not used in school. This work may be safely pronounced to be the richest contribution yet made to the teaching, if not of Hygiene, at least of Anatomy and Physiology, in schools. It is to be hoped that, as it appears under the auspices of the Government Department of Science and Art, it will speedily be turned to account in the several normal schools connected with the Government.
4. A Guide to the Knowledge of Life, designed for the Use of Schools. By R. J. Mann, M.D. London: Jarrold & Sons. (With woodcuts. A book deserving to be better known.)
5. The Philosophy of Health. By Southwood Smith, M.D., forming four of C. Knight's Shilling Volumes. (A work which no advances in scientific knowledge can render obsolete or useless. Careful and repeated perusal of it must do much to prevent school instruction from degenerating into a dull mechanical routine.)
6. Physiology applied to Health and Education. By And. Combe, M.D.
7. The Physiology of Digestion, &c. By And. Combe, M.D.
8. The Management of Infancy. By And. Combe, M.D.  
(Dr Combe's works need no eulogium. Their success has been almost equal to their merit. The latest editions ought always to be preferred. Nos. 6 and 7 have been revised by Dr. Jas. Cox; No. 8 has received the editorial superintendence of Sir James Clarke.)
9. The Essentials of Physiology. By M. W. Hilles. Renshaw, London, 1860. (A compact and useful digest, without illustrations.)
10. A Manual of Zoology. By M. Milne Edwards, translated by Dr. Knox. Renshaw, London, 1856. Illustrated by 500 wood engravings.
11. Structure et Physiologie Animales, démontrées à l'aide de figures coloricées decoupées et superposées. Par Achille Comte. Paris, Masson. (This work is used in the French Lyceums. The singularly beautiful and ingenious plates which accompany it have been introduced into an English work by Dr. Knox, and published by Baillicre.)
12. Rudiments of Animal Physiology. By Dr. G. Hamilton. (Chambers's Educational Course, 1845. A very useful and cheap little book by an early and a well-qualified labourer in this field.)

13. The Physiology of Common Life. By G. H. Lewes. 2 vols., 1859, Blackwood. (A valuable corrective to dogmatism, especially at second hand, though it may at first incline a conscientious teacher to despair. Its motto might be "Nullius addictus jurare in verba magistri." To all who can think, and not merely accumulate facts on authority, it cannot fail to be infinitely suggestive and serviceable.)
14. In the Advanced Reading Book of Constable's Educational Series, pp. 79-117, are some most admirably condensed lessons by Dr. John Struthers, of Edinburgh. (James Gordon, Educational Publisher, Edinburgh.)
15. Animal Mechanics. By Dr. Lardner. Illustrated by very many beautiful woodcuts, some of which are original.
16. Physiology for Schools, in twenty-seven Easy Lessons. By Mrs. Charles Bray. Second edition, 1860, Longman, price One Shilling. with woodcuts. (This is the latest, cheapest, simplest, and not least meritorious of all attempts to popularize this sort of instruction in our country. I trust it is destined to obtain a wide circulation in families as well as in schools. It is excellently fitted for early instruction and for domestic use.)

Many other books might be mentioned, American as well as British, some on special branches of the subject, but this list is already long enough. Teachers who aspire to more minute and thorough information will not neglect to consult such works as Drs. Carpenter's, Draper's, and Dalton's. But they must be careful never to lose sight of the practically useful; and while they deepen their own knowledge, and aspire to minute accuracy in their own notions, they must make simplicity, and clearness, and breadth their aim in teaching. Where the right spirit is, even the dry bones become again instinct with life; and the unity of the living whole is never forgotten in the multiplicity of the dead parts.

#### No. IV. p. 49.

The too common absence of all morality, as well as of true economic wisdom, in the estimate of national wealth acquired by war, that is, by plunder, is aptly illustrated by a book entitled *Traité des Finances et de la Fausse Monnoie des Romains*, &c., 1 vol. 12mo, Paris, 1740. In Mr. M'Culloch's most valuable digest of the *Literature of Political Economy*, 1845, p. 349, the authorship is ascribed to M. Chassipol. It was translated into English, and published in 8vo, London, 1741, under the title of *A Treatise of the Revenue and False Money of the Romans*, &c.

The translator, who says, however, that "the author's name is still a secret," informs us that the work was written at the request of Colbert. He does not explain the delay in its publication. In his Historical Preface he says (p. ii), "The author hath observed (but might have been more particular in his observations) how exceedingly the Roman revenues increased by their successful military expeditions. Rome, almost from the very moment of its origin, derived from war various sources of riches

which she never suffered to dry up in all the height of her power." . . . "I readily agree that it was the poverty of the first inhabitants of Rome which gave rise to this politic economy; but it was found so very advantageous that the practice was continued in the most flourishing ages of the Republic." The author himself says: "War, which is now become a bottomless pit that swallows up all the riches of a State, was then a mine from which the Romans drew their greatest treasures." . . . "It is founded on a principle of political prudence which requires that the revenue of a State should arise from the very source from whence the necessity of the expense is derived; and that war, which is a devouring monster, should be fed with its own substance, and drink its own blood."—C. i. p. 3.

This requires either no comment, or more than I have space here to offer. I quote from the copy of the translation in the Humanity Class Library of the Edinburgh University. The original I have never seen.

#### No. V.

The list of works fitted to assist the teacher in the work of instruction in Economics needs not be long.

1. Lessons on the Phenomena of Industrial Life, and the Conditions of Industrial Success. Edited by the Rev. Richard Dawes, M.A., Dean of Hereford. London: Groombridge. Second ed., price 2s.
2. Outlines of Social Economy. By William Ellis. Third edition. London: Smith & Elder, 1860, price 1s. 6d.
3. Progressive Lessons in Social Science. By the same Author. Price 1s. 6d.
4. A Layman's Contribution to the Knowledge and Practice of Religion in Common Life. By the same Author. Price 7s. 6d.
5. John Hopkins' Notions on Political Economy. By Mrs. Marcet. Second edition. London, 1833.
6. Reading Lessons in Social Economy. By Benjamin Templar. London: Jarrold.
7. On the Importance of the Study of Economic Science as a Branch of Education for all Classes. By W. B. Hodgson. Blackwood, 1860.
8. In the Advanced Reading Book of Constable's Educational Series, pp. 142-197, is an excellent Series of Lessons, by Mr. W. A. Shields, of the Birkbeck School, Peekham. Edinburgh: Gordon.
9. In the Sixth English Reading Book of the same series, pp. 315-339, the subject is continued by other hands. Edinburgh: Gordon.
10. "What is Seen, and What is not Seen; or, Political Economy in One Lesson." Translated from the French of Bastiat, by W. B. Hodgson. Manchester: A. Ireland and Co.

#### No. VI.

Towards the end of last year there was formed among the schoolmasters of London and its vicinity an Association, having for its object the study of Social Science, including both Economics and Physiology, with a special



view to the adoption of the best methods of teaching these subjects to the pupils in elementary schools. It has already enrolled more than 250 members. The prospectus is subjoined. The meetings are held in a hall granted by the Council of University College, Gower Street. The opening meeting was presided over by Lord Brougham.

## SOCIAL SCIENCE ASSOCIATION.

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Mr. T. Gover, Hon. Secretary of Elementary Teachers' Association. United Association of Schoolmasters.

Mr. T. Hales, Hon. Sec., Met. Ch. Schoolmasters' Association.

Mr. J. H. Hay, President, Associated Body Church Schoolmasters.

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Mr. T. Parker, Elementary Teachers' Association.

Mr. C. R. Roberts, Elementary Teachers' Association. United Association of Schoolmasters.

Mr. J. Tilleard, F.R.G.S. Corresponding Secretary of United Association of Schoolmasters. Honorary Member College of Preceptors.

## RULES.

### 1. NAME AND OBJECTS.

That this Society be called the "SCHOOLMASTERS' SOCIAL SCIENCE ASSOCIATION."

That the general objects of the Association shall be :

- (a) The study of Social Science, and how to teach it, as a means of raising the intellectual and professional status of Teachers, of rendering them more efficient in the teaching and the training

of the young, and thereby, of more beneficially influencing society.

- (b) The study, as opportunities offer, of kindred subjects bearing upon the improvement of the Teacher's art, in connexion with the Laws of the wellbeing of society; such, for example, as Physiology and Health.

## 2. PLAN OF OPERATION.

That the Association shall meet in conference weekly, on Thursday evening, from 7.30 till nine o'clock, or such other day and hour as may be thought advisable by the Committee, during the three Terms in each year of University College.

The Committee shall have power to arrange for any Special Class Meeting, or Course of Lectures.

## 3. MEMBERSHIP.

That all Teachers shall be eligible to become members of the Association on payment of the Fee for the Session; and that the Secretary, upon *written* application from any one for membership, do, at the next ensuing meeting of the Association, present to such applicant a card of admission.

Ladies and Pupil Teachers shall be admitted free, on application to the Honorary Secretary for Cards.

The Committee shall have the power of conferring Honorary Membership upon any one whose co-operation they think desirable.

## 4. SUBSCRIPTIONS.

That the Subscription shall be 1s. for each Term, or 2s. 6d. for the Session; or such other sum as may be thought expedient by the Committee.

## 5. MANAGEMENT.

That the Government of the Association shall be vested in a Committee of Thirteen Members—to be elected at the Annual General Meeting—Three to form a quorum. The Committee to take cognizance not only of general business, but of all affairs affecting the Association, whether at the Classes or elsewhere.

An Annual General Meeting shall be held every October, to receive a Report of the past year's proceedings, to Elect Honorary Officers and Members of the Committee, and on other general business. No rule shall be altered except at an Annual Meeting; notice of such intended alteration having been sent to the Honorary Secretary, at least a month beforehand.

## 6. OFFICERS.

That the officers of the Association shall be President, Treasurer, Moderator, Honorary Secretary, and others the Committee may appoint, all of whom shall be *ex-officio* members of the Committee.



